

# THE INFLUENCE ON ARCHITECTURE OF THE CONDITION OF THE WORKER.

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Essay awarded the R.I.B.A. Silver Medal and Twenty-five Guineas 1914, submitted under the motto "Per ardua ad astra."

I wish to examine how far the results that architects seek to achieve are conditioned by the capacity of the executants, and how far all those who are responsible for producing works of architecture—architects and executants alike—are dependent for their achievements (and not only for their achievements but for the aims which they seek to achieve), upon the social and industrial condition of the mass of their fellow-workers. The theme of the essay is, therefore, not simply the familiar controversy of "The Architect and the Craftsman," nor is it an attempt to deal only with the subject treated by Mr. March Phillipps in The Works of Man—the claim that architecture may be read as affording insight into the lives and characters of those by whom it was evolved. Rather is it an expansion of Professor Lethaby's pregnant phrase "Architecture is the matrix of civilisation." I wish to show that architecture is essentially a co-operative art, that it must express at any period the condition of the people as a whole—not merely the level of culture which its actual fashioners have reached; that the first essential of greatness in architecture is the welfare of the meanest members of the body which produces it.

The conditions governing this essay require that it shall be on a subject of architectural interest and that it shall make a useful contribution to knowledge by accurate research. I hope to show that the subject is not only of architectural interest, but is the subject of all others that architects must study if there is to be progress in our art, superseding or at least overshadowing all other studies.

As regards research, I have re-studied the history of Modern Europe, I have gathered such particulars of the condition of the workers in the ancient and modern state as I could from the various sources eited in the course of the essay, I have sought to illustrate my contentions from buildings observed during many visits to most of the countries of Europe. I must add, however, that I realise how much needs to be done in investigating the conditions of the working-class, the producers of architecture, in the past, how dependent the inquiry is upon the scanty generalisations of historians, and the need there is for patient research among the actual documents that remain.

At the outset it is necessary, I think, to draw a distinction, for the present purpose, between good architecture and great architecture. Good architecture may be defined as architecture which does not offend, which is sound in construction, suited to its function, satisfactory in mass, in outline, and in ornament, which does not excite or disturb—in a word adequate architecture. Great architecture it is

impossible to define. It was Nettleship, I think, who declared that great poetry takes one's breath away, thereby differentiating it from all other grades of achievements in poetry. The same test may be applied to architecture. Great architecture has all the qualities of good architecture, and also it takes one's breath away. It may be objected that this is in fact an arbitrary test—architecture may be great to one and not to another according to the disposition of the beholder. I believe, however, that the objection is valid only to a limited extent, as will appear in the course of the argument, and that the emotion that recognises the great work of art is universal. Great art is not the peculiar property of the counseisseur, it is the common possession of mankind. I wish to examine in the course of this essay the causes of this emotion of recognition, this gasp of realisation. I believe there are as regards architecture five causes, viz.: Impressive Size; Daring Construction; Memory; Rhythm; Humanity. These may be discussed most conveniently as they make themselves apparent in considering the different building epochs of the past. One may only add here that the emotion ultimately defies analysis—the quality that produces it in art or literature is, so to say, magic—outside our understanding, and one can only indicate what are really secondary causes.\*

In order to confine this essay within reasonable limits I will examine only the architecture of Europe. Let us first consider Greek architecture. It is clear from the outset that, in the buildings of the great building age at Athens, we have architecture that is the product of a community that has reached a high level of culture. The characteristics of the temples are extreme refinement of line, delicately adjusted proportions, exquisite finish. The effect at which the builders were aiming, too, is unmistakably clear and definite. It was the product of citizens who formed a coherent body, bound together by common tradition, common aims. "In the golden age of Athens," says Mr. Warde Fowler, "the interests of the State and individual were more perfectly identified than in any other state of antiquity."† There is apparent a passion for perfection, and the ideal is achieved; the buildings are perfect.

The limitations of Greek architecture, however, are as apparent as its achievements. It succeeds by limiting itself. It confines itself to the simplest possible methods of building, it settles upon its faultless ornament and repeats it again and again, it refuses to dare, it refuses to fail in part in order to gain in the whole, it cannot bear anything less than perfection; and that very fact limits it more than a hundred faults and failures, for, as Ruskin pointed out, imperfection is essential to life, and to refuse to recognise the necessity of imperfection is to refuse to advance.‡

Now, in its defects no less than in its great qualities, the architecture of Athens reflects the condition of the Athenian State. The citizens of Athens reached a high level of culture and refinement, but they reached that level only through the oppression or degradation of others. The glory of Athens was made possible by the taxation of her subject states outside her borders, and the labour of the slaves within them. "Judged by the standard of the nineteenth century she was not really a democracy, but a slave-holding aristocracy." Mr. Warde Fowler estimates the number of slaves at 100,000 as against 135,000 free outlanders and citizens; Professor Tucker puts the number at 300,000.

And this means that all their menial work and no doubt a great part of the work which is now done by what we call the industrial classes was done for the Athenians by persons who were in no sense members of the State, who had neither will nor status of their own, whose one duty in life was to obey the orders of their masters. The citizen of Athens had leisure to attend to his public duties, to educate himself for them, to enjoy himself at festivals and the theatre, chiefly because he had at home and in his workshop a sufficient number of slaves to carry on his affairs in his absence. It need hardly be said that from all such education, public business, and enjoyment the slave was most carefully excluded.

\*... O delight
And triumph of the poet, who would say
A man's mere "yes," a woman's common "no,"
A little human hope of that or this,
And says the word so that it burns you through
With a special revelation, shakes the heart
Of all the men and women in the world,
As if one came back from the world and spoke

With eyes too happy, a familiar thing

Become divine i' the utterance!

E. B. Br. wning, "Aurora Leigh," p. 28, Can erbury Poets.

† Warde Fowler, The City State of the Greeks and Romans,
p. 171.

‡ Ruskin, The Stones of Venice, ch. 7, Nature of Gothic, l. § and | Warde Fowler, The City State of the Greeks and Romans, p. 177.

Greek civilisation succeeded, as Greek architecture succeeded, by limiting its scope, by accepting restrictions. It restricted itself on the one hand to making good citizens of only a minority of the whole community, it restricted itself, on the other, to acquiring perfection in only the most limited types of buildings involving only the simplest forms; and it drew the means for carrying out its task, not from its own resources, but from the taxation of others, who had no share in its life,

Now it is exceedingly difficult to determine who, exactly, were the builders of the great Greek temples. Plutarch implies that they were free men, and Professor Tucker points out that manual labour was not confined to slaves, but that many free citizens would be found working at all kinds of menial occupations.\* We know, however, that the Athenian citizens did despise manual work. They hated anything that would begrime or stunt them: in their independence, they hated working for anyone for pay. † In later times they tried in greater and greater numbers to become salaried, to live on payments from the State, to leave all hard and unpleasant work to others. We know, too, that architects and engineers were numbered among the slaves.‡ We can conclude, therefore, that the evidence of history goes to confirm the evidence of the great Greek buildings that they are essentially Slave architecture. That is to say, that there is as little as possible left to the individual initiative of the worker. The columns, entablatures, and steps, with their exquisitely finished surfaces, their faultless joints, their optical corrections calculated to a hair—all these demand patient, painstaking, skilful, above all, docile labour under unresting supervision and to exact instructions. The ornament, too, with its delicate curves and inevitable correctness of outline calls for no invention on the part of the executant, permits no variation from its beautiful precision, depends, in fact, for its whole success on the fidelity of the workman to the perfected pattern set before him. The least faltering or waywardness in execution and the effect is lost.

"A slave," says Aristotle, "is a live instrument of the higher intelligence." Greek architecture reflects both a high intelligence and an excellent instrument. The very fact, however, that it was the product of instruments, not of citizens, points to its fundamental defect. Architecture, as I hope to show, is essentially a co-operative art. In any building the result attained will be conditioned not less by the character of the workmen than by the capacity of the architect, and both workmen and architect are themselves dependent for their success or failure on the social and industrial condition of the community of which they form a part.

In Greek architecture, therefore, the form of the temples and their decoration was dictated ultimately by the capacity of the workman: those workmen were instruments carrying out the projects of those who used them, not co-operators contributing their quota to the design and execution of the work. It was limited to the forms those instruments could execute without imperfection. It is therefore essentially finished, complete architecture. It stands for an aim realised, it defines, it never hints; it implies satisfaction, not aspiration. Hence, to the modern mind, its complacency is its main defect. The Greek could contemplate slavery with equanimity—Aristotle can justify the institution without misgiving —he could accept it as the basis of his state, take it for granted even, and there is no trace in the splendid calm of his buildings of any disturbance of mind, any doubt of the adequacy of the scheme of the society which he held so dear. If, as it seems to us, he solved the problem by ignoring its main difficulties, he did so unconsciously.

We to-day, however, can never recapture the Greek calm; we have, indeed, to put up with a

Aristotle, Politics, Bk. 1, ch. 13.

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Aristotle, ibid., chs. 4-8.

<sup>\*</sup> Tucker, Life in Ancient Athens, p. 48.

It is important to emphasise the fact that the slave in Athens was not necessarily oppressed, hard driven, ill treated Professor Tucker points out that he was as a rule well fed and housed, treated often rather as we treat an old family servant, certainly occupying a far better position than the Roman slave under the Empire or the modern slave in America. He had, however, no rights as a citizen, was shut out from all

that the Athenians considered as essential to the good life, and had in no sense any real freedom.—Tucker, Life in Ancient Athens, pp. 43, 44, 45.

§ Aristotle, Politics, Bk. 1, ch. 4.

One might perhaps trace a parallel between the Greek acceptance of the existence of slaves and the modern blindness to the disabilities of women.

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scheme of things in which the great mass of our communities live in a worse state of slavery, subject to greater material misery than fell to the lot of the slave in ancient Greece, but we put up with it under protest, we burn to end the wrong, the most selfish are, at least, perturbed. We could none of us, even, like the men and women of the *Decamerone*, retire from the prevailing plague and, fancy free, isolate ourselves from the miseries of our fellows.

Hence Greek architecture fails, to the modern mind, in so far as it does fail, owing to the very quality which its creators most prized—its perfection. It satisfies, but it does not stimulate: it is stationary, not revolutionary. It is undeniably great architecture, however, and before passing on to the next great building epoch, it is necessary to determine why it is great, and whence comes the thrill that stamps it so. I think it comes partly from memory—from the men and the deeds and the literature that tells of them, from the whole Greek story that is so closely connected with them. Everyone knows the potency of this association of ideas with things and how it can over-ride a hundred considerations of form and disposition and ornament and disturb the coolest criticism. Ruskin has some of his finest and most convincing writing in the chapter on the Lamp of Memory in the Seven Lamps of Architecture.

And, secondly, Greek architecture has the quality of rhythm—the seemingly inevitable response of feature to feature, which affects the beholder like an air in music, so that he is tickled and excited unawares.

Finally, it has the magic of the South which is so intoxicating to a Northerner. The surprise of the brilliance of some of the buildings and the depth of tone of the sky—in contrast to the opposite conditions of the North; the sun that draws the shadows with a soft black pencil, as it were, instead of the hard triple H to which we are accustomed here; the whole fascination of the South which throughout our history is always luring the Northerner down, which becomes articulate in the writings of half our poets, which is so difficult to describe, but so undoubted and so powerful.\* I conclude, then, that Greek architecture is great mainly through qualities which are independent of the individuality of the executant—rhythm, memory, the magic of the South. The effect of the condition of the worker is shown in its defects—for the worker was a slave.

Let us now consider Roman architecture at its highest development under the Emperors. We have to examine buildings which display as their most notable characteristics solidity in construction, impressive size, and a remarkable uniformity of style considering the exceedingly wide distribution of the buildings which remain to us. It is perhaps hardly necessary to cite examples illustrating these characteristics—the Pantheon and the Baths of Caracalla will at once occur to one as showing size and solidity, while the temples at Nîmes and Baalbec may serve as examples of the wide extent of the Roman world. Further characteristics are the elaboration of a system of construction in concrete—in walls, domes, and vaults (the particular contribution of Rome to the science of building)—a system of decoration applied to the construction but independent of it and inspired, not by the necessities of that construction, but by reverence for an earlier style—that of the Greeks—and an abundance of ornament of a uniform type but of no very great distinction in design or execution.

In investigating the conditions that were responsible for these characteristics of Roman architecture the great authority is M. Choisy, who, in his monumental work L'Art de Bâtir chez les Romains, has analysed very carefully the buildings and gathered a store of particulars of the conditions under which they were produced. Who were the men who produced the Roman buildings that have come down to us? Choisy shows how the buildings may be divided into two distinct parts—the carcase (of concrete) and the ornament applied to it, and that this division represented a division between two classes of workers.† The rough work of concrete—semi-skilled labour—would be performed by inferior work-

<sup>\*</sup> Admirably analysed by "Vernon Lee," for instance, in Limbo and The Enchanted Woods.

<sup>&</sup>quot;N'avons nous pas reconnu que chaque partie de cette

gigantesque construction [the Coliseum] constituait un chantier à part; qu'il avait un atelier spécial et des ouvriers distincts pour construire le corps de murs et les pilastres qu'i

men, by slaves, by captives, or by freemen who were liable to the corvée—and these corvées became more and more oppressive as time went on—and, as Choisy points out, they fell upon a class that had been reduced by centuries of oppression to the position of a merely passive instrument in the hands of the central power.\* Much work of this sort was performed also by the soldiers. It was considered dangerous to leave the legions in idleness—leisure too often meant revolts and tumults—and works were constantly ordered solely in order to keep an army occupied.† The carcases of the buildings, therefore, were built of concrete, an easily manipulated material, by unskilled labour which was available everywhere to an almost unlimited extent.‡ The other part of the buildings, the decoration, was carried out by workmen or slaves of greater capacity, and the method of organising these workers and those also who were unskilled (exclusive of captives, soldiers, prisoners, and pressed men) deserves detailed examination.

In the very early times the workers of Rome formed themselves into free societies (analogous to the later guilds) which, in protecting the interests of their members, continually found themselves in conflict with the authorities. Slaves were admitted to these organisations, which took part in serious rebellions (such as that associated with Clodius), and were constantly suppressed by statute only to re-arise. Julius Cæsar tried to destroy them, Trajan revived statutes suppressing them; Hadrian, however, initiated a new policy. He recognised officially the Societies (Collegia), became their patron, made them part of the machinery of the State, and so, at one stroke, got rid of a serious menace to the central authority and provided himself with an efficient instrument for carrying out his vast building enterprises. Men were now forced to join the Collegia, or were arbitrarily transferred from one to another; the remuneration of the different grades of workmen was fixed by the State—arbitrarily and unfairly; the workmen were organised in cohorts like an army; they were bound to unending servitude—themselves and their descendants—by the system of granting land to the Collegia as compensation for work done, which land, held as it was individually by the members (with the obligation of service), descended to the heirs of the workman when he died. The workman was thus thoroughly enslaved, whether nominally free or not. ||

It is not necessary, perhaps, to dwell at length upon the Roman system of government. Its centralisation was its most striking feature, \( \Pi\) and the great centralised organisation of Rome is stamped clearly on the architecture of the Empire. Its uniformity is due to the one central authority and to the one system by which, as Roman armies pushed further and further into foreign lands, they would raise, wherever they went, little Romes, not indeed identical, but all reproducing the same features, built by the same methods, embodying the same idea and by the hands of men organised from the one centre. It is official architecture, designed and carried out by officials. In its solidity of construction, its engineering adequacy, it typifies the eminently practical, rather oppressive, and inhuman strength of the Roman system in which the individual is submerged in the incoherent mass—is enslaved. In its decoration—a veneer of features derived from an earlier civilisation and misapplied, masking the real building—is reflected the artificial culture assumed by the wealthy and powerful classes in the Roman Empire.

"There is little doubt," says Professor Tucker, "that the Romans, if left to themselves, would have developed only the solid, or the gorgeous, or the baroque. . . . The Romans regarded a professional artist as only a tradesman . . . much of the work was done by slaves . . . in modern parlance, the Committees requiring some monument of art

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‡ Labour on public works, for instance, was a common punishment.

¶ See the younger Pliny's Letters for dependence of provinces on the central authority, even in detail, especially

Letters 61 to 123.

les terminent; qu'une châine de pierres régulières, intercalée dans un mur d'appareil irrégulier ou de brique, était exécutée par des ouvriers différents de ceux qui travaillent aux remplissages ? . . . la séparation si nette établie par les Romains entre la structure et la forme est significative; évidemment elle répond a une séparation de rôles bien tranchée entre les deux classes d'artisans qui se partageaient le soin de bâtir les édifices et de les orner."—Choisy,  $\hat{L}$  Art de bâtir clez les Romains, p. 199.

bâtir chez les Romains, p. 199.

\* Choisy, ibid., p. 210.

† Choisy, ibid., p. 206.

<sup>§</sup> Tucker, Life in the Rome of Nero and St. Paul, pp. 254, 255. C'était, on le voit, une situation essentiellement dépendente. . . De quelque côté qu'on l'envisage, la société romaine semble reposer tout entière sur un régime de servitude partiellement rachetée par des priviléges.—Choisy, ibid., pp. 192, 193.

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called for tenders' and were prone to accept the lowest. Whatever abundance of art the Roman world cultivated and possessed . . . it is very doubtful whether any large number of Romans entertained that spontaneous enjoyment of the beauty of art which is termed genuine artistic feeling. . . In their literature we look in vain for any expression of enthusiasm on the subject. Enjoyment there was, but it was apparently for the most part the enjoyment of the collector or of the man who realises that an appreciation of art demands a large place in culture and who is determined to be as well supplied and as well informed as his neighbour."\*

"Architecture depends on fitness and arrangement," says Vitruvius.† "It also depends on proportion, uniformity, consistency, and economy." That is the complete summing-up of architecture that can be made to order, the style that can be put down in black and white and controlled by rules.

How far is this Roman architecture great? Its claim must rest, I think, upon the impressive size of its buildings, the memories associated with them, the magic of the South—all characteristics which are independent of the condition of those who produced them. The influence of the condition of the worker on Roman architecture is shown in its defects—for the worker was a slave.

Let us pass on to the next great building epoch. With Byzantine architecture we encounter a revolution in the method of building and a definite breaking away from the conventions of the past, which requires consideration in considerable detail. We find the great constructional ideas initiated by the Romans—the dome, the vault, the concrete mass—developed and elaborated, and we find persisting too the method of applying rich and beautiful decorations to the rough and uncomely material of which the building was formed. But we find a notable difference in the nature of this decoration and in the method of its application. Whereas in the great Roman buildings the decorative forms evolved by the Greeks were applied illogically, masking the true construction, in Byzantine work the decoration is a garment of mosaic or marble fitting closely to the constructional forms, following faithfully the modellings of their surfaces, disguising nothing, but emphasising, rather, the features it adorns. Again, the column, which in those Roman buildings which, like the Coliseum, were original structures and not merely echoes of the Greek, was tending to become a decorative feature and to lose its functional significance, the column is in Byzantine work restored to its earlier uses, set to work again and made to bear its burden as a necessary member of the construction. It is no longer, however, to carry the lintol. The problem now was "to teach the column to support the arch.". We can see tentative essays towards a solution in the Palace of Diocletian at Spalato. The column carries the arch, but the traditional form of capital is still used, and almost without exception a slice of lintol intervenes between capital and arch. Tradition is still potent, the problem is faced but it is not solved. Further essays were made at Ravenna (San Giovanni in Fonte, built by Galla Placidia, and Sant' Apollinare Nuovo by Theodoric) and at Constantinople, culminating in the perfect types at Santa Sophia.

The constructional difficulty—that of fitting the solid at the springing of an arch on to a capital which, in the old form, e.g., the Corinthian, was weak at the angles, was met partly by the expedient of the impost block—which, wide at the top, tapered at the base so as to transmit the load to the central part of the capital, partly by inventing capitals of an entirely new shape.

These capitals take the most varied forms, from the convex capitals, which seem to owe so little to their predecessors, to the concave, among which the Corinthian capital is recreated for new uses. Similarly, in the decoration of the wall surfaces, the utmost inventiveness is shown, and, while the traditional egg-and-tongue and acanthus reappear (but with their character changed), there are mingled with them forms which are as original as they are beautiful, and are derived only very indirectly from the inventions of the older builders.

The supreme achievement of Byzantine art is Santa Sophia, the greatest Byzantine building and the building in which the style reached its most complete development; for Justinian, by the most assiduous toil no less than by unexampled astuteness, succeeded in devising a system that held in

<sup>\*</sup> Tucker, Life in the Rome of Nero and St. Paul, pp. 421,

<sup>†</sup> Vitruvius, Bk. 1, ch. 2.

<sup>‡</sup> Freeman, Historical Essays, Series 1.

<sup>§</sup> Texier and Pullan make the curious criticism (of the capitals of Santa Sophia) that, while beautifully executed, they "partook of the characters of all known orders, without possessing the elegance or precision of any one of them."

check for a time the forces of disintegration from within and of attack from without that threatened the Byzantine Empire. His reign is the culmination. On his death the process of dissolution begins, and the style declines with the fortunes of the Empire that created it. In the originality of its plan, the beauty of its ornament, the daring logic of its construction, Santa Sophia strikes a new note in the architecture of the ancient world. It is necessary to consider what causes operated to bring about this startling change in style.

The government of the Roman Empire under Justinian was an absolutism, but a precarious absolutism. Threatened from without by Avars and Slavs in the Balkans, by the Lombards in Italy, by constant danger from Persia and the East, there was always a tendency of the Border States, strengthened to resist the Barbarians, using that strength to dissociate themselves from the central authority. Within the turbulent population of the great city was always ready to disturb the system of government—to such an extent, indeed, that in the Nika riots it was touch-and-go whether Justinian should flee the city or remain; and only the remarkable courage and determination of

Theodora saved the throne for the Emperor.

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Lecky, in his well-known denunciation of the Byzantine Empire\* ("the universal verdict of history is that it constitutes, with scarcely an exception, the most thoroughly base and despicable form that civilisation has yet assumed"), seems to have accepted Gibbon with all his anti-Catholic prejudices and his preferences for the bizarre, without question. Professor Oman† and Professor Bury‡ have criticised Lecky vigorously and effectively, and show that, granted the existence of Oriental vices and luxury natural in a city situated on the very border of the West, there is not, in fact, in the hostile pamphlets which form the basis of Gibbon's estimate, evidence of worse conditions than could be cited of any great town of ancient or modern times in similar literature. The important fact to remember, for the purpose of this essay, is that in Constantinople in the time of Justinian we find the beginnings of Freedom and of Association among the workers—words which give the key to the development of architecture for the next ten centuries. For Choisy points out that, while in Constantinople the Roman Collegia survived, they survived under changed conditions. In the West, as we have seen, the worker was tied to his organisation which was definitely under the central authority, a part of the State machinery. In the East, the statutes limiting and penalising the members of the collegia were abrogated. Further, Justinian's laws sanction immunities and privileges for the members. They are a protest against the Roman oppressive treatment of the worker. The Western Emperors tried to force the Greek to remain and work for them by legal constraint: the Eastern Emperors tried to encourage him to do so by granting him privileges. Work was still done by military labour, as under the Roman Emperors: the corvées also survived (though to a limited extent—Procopius does not mention one), but the fact that stands out especially in regard to the condition of the workers of the time is the freeing of their organisations from the direct control of the State and, in consequence, their growing power (as evidenced from time to time in the tumults in Constantinople and in the interesting evidence given by Professor Bury, of the right to petition the Emperor and state their case before him that was secured by the workers). Not only were the organisations becoming free from tyranny without, they became also more democratic within. The συνεργασίαι were associations of workers under an elected head. They were at once craft-guilds, religious confraternities and benefit societies, but the most notable fact about them is that not only the skilled trades were organised, not only the aristocracy of labour, but unskilled workers, labourers, and porters. Moreover, whereas in Roman times the principle of division of labour was the dominant note in the organisation of the workers, in the Byzantine the principle was applied far less strictly; whereas in Roman times there was clear division of function, separate grades, separation between those who worked on the carcase

Bury, The Roman Empire, p. 67.

<sup>\*</sup> Lecky, History of European Morals.
† Oman, The Byzantine Empire (Story of the Nations).

<sup>§</sup> Choisy, L' Art de bâtir chez les Byzantins, pp. 176, 177. Choisy, ibid., p. 174.

and those who worked on the ornamentation of it, in Byzantine work the same worker's name is found on capitals and on simple ashlar. Choisy states, too, that everywhere in the East now work is done by a master-worker and his body of fellow workers, who carry out the work together, each performing every sort of task, rough and smooth, construction and ornamentation, and he gives the organisation of the workmen's guilds in the East to-day which have changed very little, if at all, from the ancient organisation of the Byzantine Empire.\* "The workman," he sums up, "is no mere passive instrument, obedient without any regard to initiative or responsibility to the workshop foreman: he is treated as an intelligent power, and finds in front of him liberty and a field open to his imagination." "In the humblest work," say Lethaby and Swainson,† "the personality of the worker is delightfully expressed. A Byzantine brick in the British Museum is stamped 'XP made by the most excellent Narsis,' and a late Roman glass cup bears the legend 'Ennius made this. Think of it, O Buyer!'"

The workmen's organisations, moreover, took part in local government: we can see the beginning of that organisation of municipalities on the basis of the guilds, which is the distinctive feature of mediæval town life. It was the duty of the guild members, for instance, on the cry "Omnes Collegiati" to gather to help put out fires in the city.‡ "The crafts occupied fixed quarters in the city: all products had to be sold in open market at a standard price: the corporation usually bought materials in block, which it distributed among the members of its collegia."§ In short, while the government of Justinian was an absolutism, while, as Gibbon says, "taxation fell like a hailstone on the land, like a devouring pestilence on its inhabitants," yet the worker was beginning to be free—free industrially—and he was attaining that freedom by the power of association.

To what, then, are the particular characteristics of Byzantine architecture due? It is daring in construction (Procopius tells of the accidents in the course of its erection—the hopes and fears when the great piers seemed ready to fail and the arches to collapse), and this may be traced to the presence of a population of free workers, of craftsmen to whom their work was not a task so much as a study: who were anxious for adventure in their art, who created an atmosphere of experiment which could stimulate the bold engineer,\*\* Anthemius of Tralles, to daring enterprise. It is original: it initiates new forms, employs features in new combination. It created an altogether new type of capital, and here again we may trace the influence of the free workman (free, that is to say, in his labour). He was not set to do a fixed task to a definite model, he experimented. "The great capitals of Santa Sophia are remarkable examples of the evolution of beautiful forms on the mason's banker, the workman finding form in the stone block by the application of practical methods."††

A workman who had by association with his fellows won freedom for himself, brought to bear on the material before him the invention of a mind that could think of the work as of something of interest for its own sake, not like a slave as a task to be got through, or like a tradesman as something of value only for what it would fetch.‡‡ And as a result originality came into the work, a new style was born, the art of building awoke.

Byzantine architecture, as exemplified in Santa Sophia, is great because of its impressive size, because of its daring construction, because, above all, of the humanity that is beginning to show itself in it—we feel that new forms are emerging, that new experiments are being tried, that in the ornament

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<sup>\*</sup> Choisy, L' Art de bâtir chez les Byzantins. "Ces associations de travail  $(\sigma v e e \gamma \gamma \sigma \sigma a a)$  ont un conseil exclusivement composé de ceux à qui un apprentisses suivi d'examen a valu le titre de maîtres  $(\mu \alpha i \sigma \tau o \rho e s)$ . Le conseil est présidé par un chef électif, le  $\pi \rho \omega \tau o \mu \alpha i \sigma \tau o \rho e$  assisté d'un secrétaire  $(\gamma \rho \alpha \mu \mu \alpha \tau e e's)$  ayant sous ses ordres un huissier  $(\kappa \tilde{\eta} \rho v \tilde{\xi})$  chargé de convocations. L'association, à l'exemple des collèges antiques, est . . une corporation ouvrière, une confrérie religieuse et une société de secours."

<sup>†</sup> Lethaby and Swainson, Santa Sophia, p. 207.

<sup>:</sup> Ibid, p. 208.

<sup>§</sup> Lethaby, Mediaval Art, p. 65.

<sup>|</sup> Gibbon, Decline and Fall of the Roman Empire, ed. Bury, vol. 3, p. 237.

Procopius of Casarea, On the Buildings of Justinian, tr. Stewart.

<sup>\*\*</sup> Agathias writes of Anthemius that "he practised the art of inventions by which Mechanicians, applying the abstract theory of lines to materials, fabricate imitations and, as it were images of real things."—Agathias, vol. 8, tr. Bury. †† Lethaby and Swainson, Santa Sophia, p. 253.

<sup>†‡</sup> For the variety in plan and construction and ornament of Byzantine building, see *The Minor Byzantine Churches of Constantinople*, C. Gourlay, JOURNAL R.I.B.A., Aug. 31, 1907, and Salonica, C. Gourlay, JOURNAL R.I.B.A., Nov. 24, 1906.

traditions are being broken through, that there are new forces stirring—in a word, the buildings begin to live. It is imperfect, no doubt; the interior is greater infinitely than the exterior: it still lacks complete unity, the form and material outside give no indication of the glorious garment with which the interior is clothed; and perhaps herein it reflects the unreality of the system that made its erection possible, the structure of society that achieved glory in oppression; that was not based on the well-being of all but on the taxation of many for the benefit of the few. It is again a little unsympathetic to Western eyes—it has much of the East in it, and recalls in its luxuriance the impressions of the strange and brilliant beauties of China, of Sumatra, of Ceylon which were brought to Constantinople by the Eastern traders who thronged to it. With Byzantine architecture, however, the building art wakes and is alive again. The influence of the condition of the worker on Byzantine architecture is shown in its merits, not in its defects, for the worker was becoming free.

After the age of Justinian Byzantine art speedily declined. The Eastern wars and the iconoclastic dispute, says Professor Lethaby, broke the tradition of the Hellenesque-Byzantine Style.\* Choisy declares that the overwhelming influence of the priests stereotyped the style and the growth of hereditary influence in those responsible for the building art paralysed it.† There were gallant attempts at revival under Maurice and Heraclius and Constantinople served for centuries as the bulwark of Europe against its foes from the East—a service to civilisation for which it has received too little credit. On the whole, however, there was a steady deterioration and by the end of the tenth century Oriental and Barbarous elements had permeated its government, commerce, army, and rulers.

Constantinople remained, however, during the Middle Ages the artistic capital of the world. " Until about the year 1000 there was little in Western Art beside Byzantinism and Barbarism and up to this time the products of the various schools might better be called Byzantesque than Romanesque."; We find undoubtedly the spread of the Byzantine influence all over Europe during the Dark Ages; not only in Italy where, of course, its traces are obvious as in Venice (Torcello Cathedral, 1008 and St. Mark's, 1045), Pisa (the Cathedral, 1063), Florence (San Miniato, 1013) but in Germany (where Byzantine artists were introduced by Otho the 2nd. who married a daughter of the Byzantine Emperor in 978), France (especially Saint-Front, Périgueux, about 1100), Spain (churches near Oviedo instanced by Professor Lethaby), England (Theodore of Tarsus, Archbishop of Canterbury, 669-690).

There is manifest in this Byzantesque or Romanesque architecture as regards the structure of buildings the old principle of stability—resisting thrust by mass—gradually giving way to experiments in equilibrium, resisting thrust by thrust: in the ornament, freedom amounting to licence, mixed with no little savagery and roughness, becoming gradually purged of its harsher elements, free, though disciplined, graceful, though still also grotesque.

The Lombard element—so amazingly vigorous and tempestuous which leaves its mark so deeply on Romanesque art in North Europe—seems to be considered now as itself derived from Byzantium and not as a source of building effort parallel to the Byzantine, originated in Rome and due to the Comacine Guild (workmen of the Collegia who, fleeing from Rome after the dissolution of the Western Empire, found a refuge in North Italy and maintained their organisation there, subsequently spreading their influence all over Europe). " Lombardic art is rather to be understood as a geographical term than a dynastic distinction."\*\*

If one may generalise over a very wide field, we may summarise the period between Byzantine architecture in its prime (525-560) and the beginnings of Gothic proper (in the middle of the 12th century) as partly a survival of the traditions of the earlier age, clung to with difficulty in a time when

Lethaby, Mediæval Art, p. 66. Choisy, L'Art de bâtir chez les Byzantins, concluding chapter.

Lethaby, Mediæval Art, p. 119.

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| Mediæval Art, pp. 89, 90: "The Eastern influence in the planning of churches worked out in detail.

<sup>§</sup> There was a slackening of effort prior to the year 1000 (when it was supposed that the end of the world was to occur) and a great outbreak of building throughout Europe after that date.

I See Leader Scott, The Cathedral Builders, for history of the Comacine Guild and the evidence in favour of the case for that Guild as the source of mediaval architecture and the link with the ancient building eras.

there was little possibility of definite advance in a world chaotic and disturbed in the throes of transition and readjustment, partly a gradual awakening, a beginning of experiment in new forms and methods, under the stimulus of a great revival. That gradual experiment, and the constant working out in the materials of building of the problems set to the builders by the new requirements of the spirit of the times, brings us without a break to its results in the style called Gothic.

The nature of Gothic has been described once and for all in unapproachable language by Ruskin in the Stones of Venice, and to attempt to summarise or paraphrase what he has written would be as difficult as it is unnecessary—for that chapter\* must be familiar to all who have studied Gothic architecture at all. Many writers have since then endeavoured to sum up the essential elements of Gothic in a definition, or describe them in the space of a paragraph. Far the most adequate summary of its characteristics, I think, is that given by Professor Lethaby in Mediæval Art.† "Gothic architecture was developed by free and energetic experiment: it was organic, daring, reasonable, and gay. The measure of life is the measure of Gothic . . . As to these marvellous buildings [the great cathedrals] the half of their glories and wonder cannot be told. They are more than buildings, more than art; something intangible was built into them with their stones and burnt into their glass. The work of a man, a man may understand, but these are the work of ages, of nations. All is consistent development, stone is balanced on stone, vault springs from vault, interlacing tracery sustains brilliantly dyed glass as branches hold sun-saturated foliage, towers stand firm as cliffs, spires are flung into the air like fountains. In these buildings all may be explained as devised for ritual use and for the instruction of the people: all as material and structural necessity: all as traditional development: all as free beauty and romance in stone. From whichever point of view we approach them, the great cathedrals satisfy us, and their seeming perfections are but a part of a larger perfection. Nothing is marked, nothing is clever, nothing is individual nor thrust forward as artistic: they are serene, masterly, non-personal, like works of Nature—indeed they are such; natural manifestations of the minds of men working under the impulse of a noble idea."

That description of the elements of Gothic can hardly be bettered. We have now to inquire into the causes of the growth of this great and triumphant achievement in the building art, and in the course of this inquiry further characteristics of the style will emerge. In the first place, we may note that in the early years of the twelfth century a great religious and intellectual movement began throughout Europe. During the Dark Ages, the huge Empire of Charles the Great having broken up, there was chaos all through the West. Norsemen raided the Western coasts, Saracens threatened Italy and France and were all powerful in the Mediterranean, Magyars and Slavs invaded Europe from the East. The Church was corrupt, the nobles were selfish and cruel and oppressed the common people remorselessly; kings were weak and their kingdoms crumbling to pieces. Feudalism, however, had, by the beginning of the tenth century, saved Europe from the Barbarians; Henry the Fowler, in Germany, beat back the foes from the East; the Norsemen were settling down in the West; the Christians in Spain, profiting by the divisions of Islam, were getting the upper hand of the Moors; Cluny was founded in 910, and began an era of religious reform and revival. In 1077 Gregory VII, won his memorable triumph over Henry IV. at Canossa, and throughout the twelfth century a remarkable outburst of religious enthusiasm permeated all the peoples, and was shown not only in the Crusades (1095-1275), but in the founding of the great religious orders, the Carthusians (1080), Cistercians (1098), Augustinians (1105), and Premonstratensians (1119). Abelard (1079-1142) and Arnold of Brescia (died 1155) stand for that "Twelfth Century Renascence" which invigorated with new thought a Church which, as a result of the religious revival that we have described, stood at the height of its power, and was infused with a boundless enthusiasm and devotion. This devotion showed itself most notably in the great buildings which were everywhere raised to the glory of the Church—to such

<sup>\*</sup> Stones of Venice, vol. 2, ch. 6, " Nature of Gothic."

<sup>†</sup> Lethaby, Mediæval Art, pp. 142, 143.

an extent, indeed, that the church bells were said to answer each other across hill and vale all over Christendom.

We shall see that this common bond of religion had no little influence upon the forces that brought about the achievements of Gothic architecture. A most important factor also, however, was the change that was taking place in the condition of the worker.

We have seen that the Byzantine worker, associated as he was with his fellows, had, to a large extent, freed himself from those restrictions which made the Roman workman a slave, and had begun to organise free self-governing guilds which, independent of the central authority, had yet begun to take part in municipal life and find for themselves a place in the scheme of the organisation of the community as a whole.

We see now that, during the Dark Ages, the guild idea still remained as in Constantinople, and that Byzantine masons, spreading all over Europe, but still remaining members of their guilds, kept alive the old principle. Professor Lethaby notes, for instance, that the order of the Arti in Florence in the thirteenth century follows closely the Constantinople models of the ninth century,\* that the guild regulations of Paris are similar, and (more remarkable still) the Byzantine word for mason (λατώμος) was used both in France and England in the thirteenth century. Leader Scott traces also in detail the journeys of Lombard masons—often in the train of missionaries—to the remotest parts of Europe.

But apart from these evidences of the continuity of the particular guild with which we shall be chiefly concerned—that of the masons—we find these associations springing up in the West independently, bred naturally from the dangers and difficulties of the time. Brentano<sup>†</sup> traces the original religious guilds—" sworn fraternities for the protection of right and the preservation of Liberty" directly to the family, to the development of needs greater than the family could satisfy, and the forming, therefore, of an organisation, modelled upon it, but wider in scope. These guilds were independent of the towns, but in the twelfth century arose and multiplied the guilds proper—the Guilds Merchant—which were practically associations of citizens for the protection of their towns (again a natural outcomes of the insecurity inherent in the feudal system). Originally co-extensive with the male population of the town, the Guilds Merchant tended, after the initial struggles were over and some security attained, to become exclusive, to be restricted to those citizens who owned a certain amount of property. Membership tended to become hereditary; the craftsman and all who worked at manual occupations were debarred from participation in the guilds, which tended to become oppressive oligarchies. This state of affairs was responsible for the formation of the craft-guilds organisations of the workers on lines exactly similar to those of the Guilds Merchant, but democratic and inclusive of all members of the craft concerned.

Brentano gives in detail the history of the early struggles of the craft guilds with the "patricians," and sketches their progress from unauthorised unions of workmen to recognised responsible institutions the representative body in every town. The time of the origin of the craft guilds extended from the eleventh to the middle of the thirteenth century. By the middle of the fourteenth century the craft guilds were everywhere victorious (Edward III. gave his approval to the guilds, and himself joined the Linen Armourers). By the beginning of the fifteenth century their decline and demoralisation had set in. The great industrial revolution of the end of the fourteenth century spelt ruin to the guilds. Their whole system depended on the practical immobility of labour. They postulated stability in industrial conditions, a stationary population that was very largely self-sufficient as regards each unit, a federation of self-supporting non-dependent communities. Above all, it was necessary to have a rural population that, fixed on the land and supporting itself on the land, should offer no competition to the worker in the town. In short, given stable groups, the guild organisation was able to cover the

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<sup>\*</sup> Mediæval Art, p. 145. † Leader Scott, The Cathedral Builders.

Brentano, History and Development of Guilds.

<sup>§</sup> Brentano, pp. 32, 33, for evidence of power of early Guild Merchant, e.g., Sleswig, 1130.

|| Brentano, ibid., pp. 55, 56, 57.

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industries in each group and regulate them in accordance with the wishes of its members-it was essentially an order of society based on non-competing groups.

Towards the end of the sixteenth century, however, there came about a radical change in the structure of that society: the capitalist system of production was born. The essential conditions for the existence of that system are thus summarised by Hobson.\* First, a production of wealth not required to satisfy the current want of its owners, and therefore saved. Second, the existence of a proletariat or labouring class deprived of the means of earning an independent livelihood by putting their labour power into materials which they can freely appropriate, purchase, or hire, consuming or selling the product for their own advantage. Third, such a development of the industrial arts as enables indirect methods of production to afford profitable employment to organised labour groups using tools or machinery. Fourth, the existence of large, accessible markets, with populations willing and economically able to consume the products of capitalist industry. Fifth, the capitalist spirit, or the desire and the capacity to apply accumulated wealth to profit-making by the organisation of industrial

The first condition was achieved by the discovery and appropriation of the precious metals. That wealth had been accumulated throughout the Middle Ages is of course obvious, but until "treasure" had been obtained it could not be employed as a basis of profit—wealth must be "monetised" first. It was the final collapse of the Byzantine Empire (in 1452) that opened the near East to the exploitation of the West and provided the necessary mediums for the transaction of capitalism. The existence of a proletariat was secured by the same event-" a huge proletariat, slave or nominally free, was . . . placed at the disposal of Europe in the near East." Secondly (for England) by the Flemish demand for wool which, following after the abandonment of the traditional system of tenure of the rural workers after the Black Death, made pasture profitable, led to wholesale enclosures, the formation of large pasture farms under new men with aims entirely different from those of the old nobility, and the conversion of the yeoman and landed labourer into the landless wage-earner. The break-up of the Middle Ages began suddenly and dramatically in the fifteenth century to give place to the modern competitive commercial system. The immediate effect on the Guilds was that they found themselves faced with a great influx of labour into the towns. The transition from agriculture to sheep-farming meant the employment of far fewer hands, the enclosures deprived thousands of their home and living and they all flocked to the towns—to offer the only commodity they had for sale—their labour—for what it would fetch there. ‡

The Guilds, therefore, faced with the competition of great numbers of workers from outside, were driven to choose between admitting them to the organisations or excluding them, not only from the Guild, but also from the trade or craft. The first solution not unnaturally seemed impossible—it implied the lowering of the standard of production and with it the standard rate. Their dearly bought skill, the traditions they guarded, were not to be given away broadcast. They decided on exclusion. The Guilds now became more and more difficult to enter, they demanded greater and greater privileges. They seek to avert by strict regulation the incidence of that competition which was foreign to all their ideas and which threatened to shatter the whole system of their industry.

The craftsmen are now, therefore, not the ordinary citizens organised in their callings, but a privileged class, a body set apart from the general mass-" artists." Temporarily they won the day, but the victory meant their eventual extinction. Like the old Guilds Merchant they had become unrepresentative of the mass of the workers. There had grown up outside their ranks a regular "working-

<sup>\*</sup> Evolution of Modern Capitalism, p. 2.

<sup>†</sup> Hobson, ibid, p. 11. † More, Utopia, Temple Edn., pp. 19, 20. The husbandmen be thrust owte of their owne . . . , by one means therefore or other they muste needes departe awaye poore, selye, wretched soules, men, women, husbandes,

fatherlesse children, widows, wofull mothers with their yonge babes and their whole houshold smal in substance and much in numbre, as husbandrye requireth manye handes. Awaye thei trudge, I say, out of their knowen and accustomed houses, fyndynge no place to reste in.

class" unknown before.\* Like their predecessors, the craftsmen of the early Middle Ages, this class would have to form their own organisations and fight for their rights, for the maintenance of a standard rate and for regulation of trade conditions—but in far different circumstances and not till centuries had elapsed.

But in the consideration of Gothic—whose great period was roughly from the middle of the twelfth to the middle of the fifteenth century—we are concerned with the guilds at their best: not in their decline, nor when they had become corrupt and demoralised, but when they were free great associations, the defenders of freedom—as the living elements in the towns—against the tyranny of the Kings, the

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What was the effect on Gothic architecture of the condition of the workers—the guild-craftsmen of the Middle Ages? In the first place, the work was carried out in the spirit of real co-operation. The individuality of the worker was not suppressed, but each was called upon to contribute his quota of invention as well as of simple execution. The architect worked with the workmen, the members of the guild discussed problems, meeting together as they arose; the general lines of the building being decided and known to each worker, freedom, to a greater or lesser extent, was allowed to the individual worker in the detail for which he was responsible. \textstyle \tex

Thus from the fact that the worker was constantly forced to bring his inventive powers to bear on the fashioning of the material before him, new forms were continually evolved, existing forms were infinitely varied. He was controlled and restrained, however, in the exercise of this inventiveness by the tradition so carefully handed down in his guild, and by the customary methods of treatment which it taught. Hence arises that amazing unity in variety which is so characteristic of the great Gothic buildings. The individual workers were free to invent, but the result was not anarchy because a common aim and common tradition co-ordinated their efforts almost without their being conscious of it.

Again, this very blend of freedom and association produced another characteristic of Gothicits imperfection. The man's reach must exceed his grasp. He will (if he is free) not key down his aim to the level of his execution, but constantly aim at more than he can compass—he will suggest an ideal rather than achieve it. The Gothic builders were always daring new feats, attempting hazardous constructions, and sometimes failings—but this is the particular glory of Gothic, that it implies growth, aspiration, adventure. In the later period the inspiration slackens, the end attempted is achieved, execution even outruns invention, but that is in the decline of Gothic, when the economic and social conditions essential to its life are no longer in existence.

In the great period of Gothic there is a wonderful humanity about the buildings. They are not the obedient carrying out of the ideas of an artist for the admiration of a connoisseur; they are

\* For Guilds' inclusion of all workers and subsequent growth of working class of wage-earners outside them, see Brentano, Origin of Guilds, p. 72; Mrs. J. R. Green, Town Life in the Fifteenth Century, vol. ii. p. 101; Lodge, Close of the Middle Ages, p. 424; S. and B. Webb, History of Trade

Unionism, p. 6. † Mrs. J. R. Green, Town Life, vol. ii. pp. 108, 109. "One of the main results of the triumphant guild system was to develop throughout the country a formless, incoherent multitude of hired labourers, who could by no possibility rise to the positions of independence, and had no means of association in self defence. As the weaker members of the crowd from time to time sank back into utter penury, the outcasts of the industrial system slowly gathered into a new brotherhood of the destitute, and even in the fifteenth century, long before they had been reinforced by the waifs and strays of town and country that flocked to their sad fellowship on the dissolution of the monasteries, the advanced guard of that army of paupers appears in the streets of the boroughs to trouble the councils of municipal rulers."

‡ For full particulars, from documents, of the details of mediæval building organisations, see Leader Scott, Cathedral Builders, Bk. 4, chs. 3 and 4; see also Lethaby, Westminster

Abbey, Appendix, p. 362.

§ Mr. Blomfield's contention that the Gothic builders were bad builders (Presidential Address, R.I.B.A., November 8th, 1913, p. 2) because some of their structures failed—either soon or after centuries-is beside the mark. The risk of failure that is the inevitable accompaniment of daring, rarely troubled the judicious architects of the Renaissance; but they were not therefore better builders than the bolder men of the Middle Ages. In the same passage, the criticism of the Guilds as "hopelessly corrupt in their latter days," and of the sixteenth century master builders as "mostly bad builders." refers, of course, to a period when the Middle Ages had come to an end, the whole mediæval structure of society had been broken up, and the Renaissance was in full career.

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the sum of the aspirations and endeavours of a body of workers appealing to their fellow workers, bound in sympathy with them by ties of common outlook, common social condition, and, above all, common religion. A great cathedral like Amiens is the product of the workers no less than of the architect; it is the product, too, of the desires of their fellows—the common people for whom both the details of its sculpture and the symbolism of its construction made up a Bible, a book every page of which they could understand.

"It takes two," says Thoreau, "to tell the truth—one to speak and one to hear," and he means by that, I fancy, not that truth may be told and be unrealised for lack of hearers who can understand, but that without both those elements truth cannot be told at all, however much it may be felt. That gives the clue to the triumph of mediæval architecture. There was the "effective demand" by the whole body of the community that made the response by the builders possible—effective through the sympathy born of equality in essentials, however great might be the disparity in externals between the members of the community. Everywhere over Europe in the twelfth and thirteenth centuries the guilds of workers were fighting for freedom, everywhere the "free towns" were showing that by combining together the workers, powerless as individuals, could win their rights against the most powerful opponents.\*

Freedom and association are the two ingredients† of Gothic architecture. It is great architecture, and great because it fulfils all the conditions of greatness laid down at the beginning of this essay. The cathedrals have impressive size and daring construction—can any other building give the same shock of wonder and delight as Beauvais, with its dizzy heights, its slender grace, its springing spiny rigidity?

It has rhythm—at S. Ouen, Rouen (the very crest of the wave, the bloom of Gothic—even just beginning to be over-blown), it is perfectly realised, and in a hundred other Gothic buildings of less regularity part answers to part with inevitable balance and responsiveness. It is penetrated through and through with humanity—whether in the multitude of voices on the West Front at Amiens, or in the little familiar whispers of the builders in small country churches; in the fault which caused a difficulty to spring up, and the ingenuity that found a way round it; in the triumphs and failures that together make up a greater perfection than can be won by achievement alone.

Finally, for Gothic as for Greek and Roman art, the magic of memory works its wonders. The influence of the condition of the worker on Gothic architecture is shown in its beauties, is in fact the very essence of its composition, for the worker was free.

We have seen how the decay of Gothic architecture came about. It synchronised with the breakup of the mediæval system—economic, industrial, and political. It was the product of the special
circumstances of its time, the outcome of the conditions under which its producers lived and worked.
To try to prolong it or to revive it after those conditions had disappeared was to attempt the impossible.
The worker was being transformed from a free, largely self-sufficient citizen, associated closely with
his fellows and controlling with them the conditions of his labour, into a wage-earner, without influence
on the methods or aims of the productive machine of which he was a part, an instrument in the hands
of the capitalist and yielding profit to him. The word "instrument" recalls Aristotle's phrase, "the
slave is an instrument of the higher intelligence"; we are reverting to the conditions that produced
classic architecture—a return to classic forms was inevitable.

It is perhaps hardly necessary to sketch the progress of modern capitalism, the decline in the position of the worker. It is enough to point out that the constant improvements in production characteristic of modern industry are capable of bearing fruit either in an amelioration of the lot of

<sup>\*</sup> Lodge, Close of the Middle Ages, pp. 424, 425.

<sup>†</sup> Mr. March Phillipps' identification of Gothic with the spirit of Nationality (Works of Man. pp. 195, 196) is difficult to accept. The growth of French national feeling, promised in the success of Philip Augustus, was very slow and set back by continual reactions. The dominant influences in the Middle Ages are the persistence of the idea of the Empire

and the unquestioning adherence to the conception of a universal Church (Bryce, Holy Roman Empire). It was these bonds uniting men of all lands, combined with the local freedom and growing nationality which Mr. Phillips notes, that gave to Gothic its unique character of infinite local variety with remarkable general similarity in essentials.

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the producers (e.g., shorter hours, higher wages) or in an increase of profits. That the accumulation of wealth in the hands of certain members of the community (capitalists) enables them—even forces them—under competition to divert the surplus produced to profits, since, owing to the improvements making the same amount of production possible with less labour than formerly, a reserve of labour is created, which, by its competition for subsistence, tends to force wages down to subsistence level. By association with his fellows, the worker, individually powerless, may secure a proportion of the surplus he has helped to create, but this revival of the principle of association, striking as it is to-day, was of slow growth, and is valuable rather as an indication of what may be achieved than on account of what it has already won.\*

The effect upon architecture of the alteration in the status of the worker was instantaneous and striking. In the first place, we find the demand for building works coming less from the community as a body and more from the individual—in proportion as wealth began to be concentrated more and more in the hands of individuals and sections of the nation, and less and less distributed as the possession of organisations. Hence the great guild churches (as at Lübeck, for instance) and guild halls (as in Belgium) give place to mansions built to emphasise the power of a king or to advertise the wealth of a minister. Churches are still built, of course, in profusion, but they are not raised directly by the organised workers. Thus, in France, Chambord rises to gratify the passion for magnificence that was the dominant motive with Francis I., Chenonceaux is built by a successful banker, later Vaux-le-Vicomte is raised, avowedly, to advertise the unscrupulous acquisitiveness of Fouquet.†

Further, in the early Renaissance buildings, there is visible an extraordinary anarchy. The old freedom is still alive, but it has lost the controlling tradition that could harmonise the idiosyncrasies of individuals. It is charming because it is the last outburst of freedom by the workmen, it evokes affection if it fails to call forth reverence. It makes it clear that, so changed are conditions, co-operative art—in its fullest sense—is impossible. The demand for control by the architect is insistent. The progress of the degradation of the worker is slow, but already he must work under orders, he is no longer capable of determining the course of his own endeavours, he must go into harness, and the architect will hold the reins. Nowhere can this change be seen more vividly than at Blois. There the François Premier wing is a riot of irregular arrangement and fanciful detail. It is not so much freedom as license. It is striking, but fretful, clever, restless, and incoherent. Right against it stands the great mass of the Gaston d'Orléans wing, restrained, purposeful, complete. It is on a lower plane altogether: it is architect's architecture: the worker's individuality does not become articulate at all in it, but it is more successful than its older neighbour, because the conditions which made the free collective production sought to be realised in the one unattainable, were conformed to in the autocratic individualism of the other.

In the later works of the Renaissance the process goes further still. The change from Gothic is admirably summarised by Professor Lodge:—‡

Gothic architecture, whatever its faults, had given great scope for originality. After the main design had been agreed upon, the completion of details had been left, in great measure, to the ability and imagination of the individual workman. But the architecture of the later Renaissance laid supreme stress upon symmetry and uniformity. Thus the workman could no longer be allowed to be original. Every detail, as well as the central design, had to be fixed from the outset. The result was magnificent and imposing, but it was purchased at the sacrifice of originality and imagination. When the first vigour of the intellectual revival was spent there was a marked decline in architecture as in sculpture, because in both the imitative faculty was cultivated rather than the power of independent creation.

Hence Renaissance architecture is in no sense progressive; it does not evolve new forms, but is occupied with adjustments and adaptations of features already evolved. As we have seen in Byzantine architecture, as soon as the worker began to attain freedom (through association with his

<sup>\*</sup> Hobson, Evolution of Modern Capitalism, chs. 1, 2, 3.

<sup>\*</sup> W. H. Ward, Renaissance Architecture in France, vol. ii.

<sup>\*</sup> The Close of the Middle Ages, p. 532.

fellows) and was allowed to exercise his ingenuity upon the material before him, he produced a great variety of new forms, the product of the thought which was stirring in a mind awake to the problems latent in every constructional enterprise.

The same phenomenon was even more apparent in the Mediæval period. With the Renaissance, however, as we have seen, the condition of the worker unfitted him for the undertaking of such a task; the architect, not himself in contact with the material, working out his design in the office, not in the workshop, was equally unfitted, and the result was a practice of architecture which, perforce, had to seek approbation on the ground of the learning it displayed, the penetration into the spirit of classic architecture which it evidenced, the ingenuity with which it adapted classic forms and ideals to the changing conditions of the time. To recall a famous phrase of Meredith: the Renaissance architects had not genius but they had "aptitudes."

A further effect of the change in character sketched above was that the appeal of architecture was more and more to the cultured, less and less to the common people. And this was so, not only because the architect was adopting a style which could only be appreciated by persons familiar with the history and literature of the community whose ideals it expresses, but because the mass of the people were tending steadily towards that alienation from direct individual production which characterises them to-day. That is to say, the "effective" demand for building work which we noted above as characteristic of the communities of the Middle Ages was diminishing; it was ceasing to be the demand of people who knew what they wanted for work which they could understand; it tended to become the demand of inexpert consumers (with the exception of the aforesaid connoisseurs) for a commodity of whose merits they were incapable of judging. The intimacy between the producer and the consumer, between the craftsman and his fellows, was disappearing. The responsive sympathy between the individual and the community which is essential to the production of great art was gone.

I need hardly elaborate the history of the change in the status of the worker which took place gradually but with increasing velocity during the latter stages, from the sixteenth century to the twentieth. We have at first the breaking up of the mediæval non-competing groups by the revolution that followed the Black Death (sketched above). We have the creation of a proletariat—an army of landless, resourceless workers, threatening by their struggle for subsistence the customary standard of the old organisations. We see this army swollen by the dissolution of the monasteries in the sixteenth century; and we see the creation, through the monetization of wealth, of the capitalist who is destined to inaugurate the system whereby the possession of accumulated wealth is to yield profit, through the acquisition of materials and the organisation of labour on a large scale: a system which is the antithesis of the mediæval trade policy whose fundamental principle was "protection to live freely and independently on an industry based on small capital and labour."\* We see by the application of the principle of division of labour and by the marvellous inventions of the late eighteenth and early nineteenth centuries, the individual becoming more and more closely involved with his fellows in the processes of production, but involved in processes over whose direction he had no control whatever, until at length he is brought to a condition which has some analogy with that of the worker under the Roman Empire, namely, that he is forced into associated production, without a voice in the direction of the body that controls him: he is to all intents and purposes a slave. † We reach. finally, the curiously anomalous situation with which we are familiar to-day, of a community whose

<sup>\*</sup> Brentano, Origin of Guilds, p. 58. Note resistance to "cornering" cited in the same paragraph.

<sup>†</sup> Ruskin, Stones of Venice, vol. ii., ch. 6. par. 1. . . . the foundations of society were never yet shaken as they are at this day. It is not that men are ill fed, but that they have no pleasure in the work by which they make their bread, and therefore look to wealth as their only means of pleasure. It is not that men are pained by the scorn of the upper classes, but they cannot endure their own; for they feel that the kind of labour

to which they are condemned is verily a degrading one, and makes them less than men. Never had the upper classes so much sympathy with the lower, or charity for them as they have at this day, and yet never were they so much hated by them, for of old the separation between the noble and the poor was merely a wall built by law, now it is a veritable difference in level of standing, a precipice between upper and lower grounds in the field of humanity, and there is pestilential air at the bottom of it.

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units are closely associated and interdependent, but are divided sharply into mutually antagonistic classes; a community which devotes itself with ardour to production, but is little able to determine what and how it shall produce; a community in which industrial slavery and political freedom exist paradoxically side by side, which possesses all the elements which contribute to a coherent society, without the essential force that can bring them together.

Now during the Middle Ages the bonds that united in strong sympathy the disconnected, selfsufficing communities of Europe were three. First, the common organisations—the guild system which united members of the same craft together. Without endorsing Leader Scott's claims for the universality of the Comacine Guild and its direct responsibility for so many of the great building achievements of the Middle Ages, the particulars she quotes from the documents collected by Cesare Guasti give exceedingly interesting evidence of the working of the guilds in detail. Especially illuminating is the account of the relations of Brunelleschi with the Masons' Guild in Florence, his strike for independence of the organisation, his final triumph, the break-up that followed of the Guild—the old democratic organisation of the workers—and its supersession by Lorenzo de Medici's school in the Via Larga—the appanage of the wealthy connoisseur. How closely the guilds were connected with the government of a mediaval community and how their decline synchronised with the gradual diminution of freedom in that community may be very clearly observed in the changes which took place in the constitution of Florence from the thirteenth to the sixteenth century—from the early Constitution based on the Seven Greater Arti and the Fourteen Lesser Arti, through the gradual modifications inserted by Lorenzo de Medici, to the final overthrow of the Republic and the appointment of Alessandro de Medici as Grand Duke in 1530.\* The part played by the free towns in modifying the worst results of Feudalism and creating new ideals of freedom has already been touched upon. The results of this change in the status of the worker may be studied, too, with advantage in the immortal autobiography of Benvenuto Cellini—the reverence for imitation of the antique instead of original creation, the dependence of the worker on the rich amateur, the chaos that ensued from the "triumphant emergence of the individual"—all are evidenced in page after page of his narrative.

The second bond that united the communities of the Middle Ages was the idea of the Empire. The survival of this idea of a common head of the peoples of Europe, of a mysterious semi-sacred tie, however fragile, of a sentiment that might stand for the sum of the desires of the Western peoples—the survival of this idea in face of the growing sense of nationality, is one of the most remarkable phenomena in history. Bryce has worked it out in the Holy Roman Empire in a most masterly summary. The important point to recognise, for the purpose of this essay, is the fact that, although the Empire did not actually come to an end formally till 1806, the last great exponents of the Imperial Idea, the last sovereigns who were able to give that idea any sort of concrete reality, were Maximilian I. (1493) and Charles V. (1519). The triumph of nationality and the last stages of the Empire coincide with the end of the Middle Ages and the beginning of the Renaissance.

The third bond, closely connected with that of the Empire, was the Church. The influence of the Church in the Middle Ages was, of course, almost greater than we can realise. However much the principles it taught were neglected and controverted in the lives of those who professed them, however ineffectual the Church was as a scheme of government, it was the one great stable institution amid the chaos of the Middle Ages, the one power that could stand for a scheme of organisation amid a welter of conflicting interests; above all it impressed on mediæval thought ideals which, however

<sup>\*</sup> Summarised in Europe in the Sixteenth Century. A. H. Johnson, Appendix 2.

J.A. Symonds, Renaissance in Italy. The Fine Arts, p. 351. "These three men—Machiavelli, Cellini, and Arctino—each in his own line, and with the proper differences that pertain to philosophic genius, artistic skill, and ribald ruffianism, sufficiently indicate the dissolution of the social bond in Italy

They mark their age as the age of adventurers, bandits, bullies, Ishmaelites and tyrants." The extent to which the spirit of association had decayed in the last two centuries is well illustrated by the growth of the Lyric—the cry of an isolated soul for sympathy—and is summed up in M. Arnold's stanzas "To Marguerite," a point of view almost incomprehensible, to the man of the Middle Ages.

far they fell short of realisation, profoundly modified the defects and counterbalanced the vices of the men of that age, an age of mingled horror and delight, of abasement and achievement.

Mr. Davis concludes an able description of the defects and virtues of the mediæval Church\* with the following summary of the abiding value of its influence: "What appeals to us in the mediæval outlook upon life is, first, the idea of mankind as a brotherhood transcending racial and political divisions, united in a common quest for truth, filled with the spirit of mutual charity and helpfulness and endowed with a higher will and wisdom than the individuals who belong to it; secondly, a profound belief in the superiority of right over might, of spirit over matter, of the eternal interests of humanity over the ambitions and passions of the passing hour. Without Christianity these articles of faith could scarcely have passed into the common heritage of man; and, without the Church, it is in the last degree improbable that Christianity would have survived that age of semi-barbarism in which the foundations of the modern world were laid."†‡

We see then, in the Middle Ages, the principle of association everywhere dominant. The individual is powerless. In the village communities (with common ownership and cultivation under the manorial system), in the Church, in the guilds, the fact is realised that the individual by himself is powerless, that it is only by association with his fellows for mutual protection that he can attain freedom. It is realised that it is only by the individual losing himself in the community that his individuality emerges. The Renaissance (when, as Professor Blomfield reads it, "the long struggle of the individual towards self-realisation ends triumphantly")\sqrt{s} marks the disappearance of that individuality with the endings of the associative influences that brought it forth. The guilds were swamped by the creation of the proletariat, the Empire was shattered to fragments by the impact of the force of nationality, the Church was divided and weakened to a shadow of its former self by the Reformation and all that it inaugurated in the region of thought.

To regret these great happenings, as some have done, is to the last degree unwise. Putting aside all other considerations, if the immediate results to our art were disastrous, yet that revolution which made the modern world what it is to-day offers infinitely greater possibilities than even the Middle Ages afforded the men of that day. Architecture is essentially a co-operative art: its very nature requires the existence of that principle of association which we have seen characterising the life of the Middle Ages. That principle is, as I hope to shew, implicit in the industrial conditions of the modern world, and capable of an intenser as well as of a wider realisation than has ever hitherto been possible.

At this point, however, I wish to summarise briefly the effect of the Renaissance on architecture. I have already indicated the principal changes in architectural methods and aims which followed the altered condition of society that the revolution of the fifteenth century brought about. It may bring out more clearly the essential qualities of Renaissance and Modern Architecture if we consider what has been written of it by one of its ablest exponents—Professor Blomfield. As Professor of Architecture at the Royal Academy he has summarised his teaching in a series of admirably expressed and closely argued lectures—The Mistress Art—and has more recently—in his Presidential Address to the Royal Institute of British Architects—stated his views briefly and in a more polemical form. If we examine The Mistress Art we find the author's views taking shape very early:

The individuality of later Gothic is as remarkable as its uniformity, but it is the individuality of detail rather than of architecture. The sculptor carved whatever took his fancy in his home or in the fields around him, and so the range of his detail was infinite; but the building as a whole attached itself to some well-defined type, and can hardly be regarded as an individual expression. So, too, in the earlier years of the sixteenth century in France and England, the last days of the master-builders, we find detail of every kind, but nothing as yet to show the impress of the mastermind. It is not till the maturity of the Renaissance that the long struggle of the individual towards self-realisation ends triumphantly, that the architect becomes henceforward an individual artist, conscious of his own technique and

<sup>\*</sup> H. W. C. Davis, Mediaval Europe, chaps. 5 and 6.

<sup>+</sup> Ibid., pp. 154, 155.

<sup>\*</sup> For religious basis of the guilds, see Brentano, p. 69.

<sup>§</sup> The Mistress Art, p. 52.

ideals, as the painter and sculptor of theirs. It is only then that the materials are available for what one may call the psychological study of architecture, that is, the interpretation of an artist's work by his personal temperament.\*

That passage challenges the whole position that is sought to be established in this essay. Is the architect, as a matter of fact, in a position comparable to that of the painter or sculptor? Is it a triumph when he becomes an individual artist, or is it a sign that his art has passed, for the time, from the heights where the noblest achievement is possible to a level where the best that can be attained is only second-best?

believe that the position that Professor Blomfield takes in this passage—and it is implicit in the whole book—is fundamentally unsound. Architecture is essentially a co-operative art. First, it is, as Bacon emphatically stated, not merely the practice of an art, but the production of a utility. It is therefore closely connected with the life of the people as a whole, must reflect their needs, must be controlled by their requirement, must be conditioned by their demand. The architect is in no way (as is the painter or sculptor) free to give conscious expression to his individual ideals: only so far as those ideals correspond with those of the community as a whole can be make them take form. Great architecture presupposes an intimacy between the individual architect and his fellowproducers which is the very antithesis of the conception of the artist as one of a class separate from the mass of his fellows and seeking the expression of his own individuality consciously.

Secondly, the architect does not by himself give form to the work he has planned. Unlike the sculptor or painter, he is forced to work in association with others. He must work with or through his fellows. If he works through them, if he is to impress his individual ideals upon the work, the executants must be entirely under his control, docile, obedient, carrying out with accuracy the designs he has set for them to copy. This can be done and is done, but the result is, do what you will, secondrate. The reproduction of a copy can never be the same as spontaneous original creation. Human beings are so made that if you suppress their individuality you lose what you cannot replace—the mysterious quality that makes beauty. Freedom is an indispensable ingredient of beautiful work.

On the other hand, if the architect is to work with, instead of through, his fellows, there is implied a close intimacy, a sympathy, an equality of condition and similarity of outlook which is impossible of realisation to-day. "Associated Building," as practised in the Middle Ages, is entirely unrealisable in the modern world. Professor Blomfield ridicules it,‡ and shews how impracticable it would be under modern conditions—and does not realise, I think, how far that frank admission will carry him. It is in the line of argument that his appreciation of the revived Classic style leads him to follow, however, that the limitations of that style can most clearly be traced. Thus he is led to the conclusion that the one indispensable element in great building is size, or the impression of great size \—the one element, that is, which is independent of the quality of the labour employed, independent of the character of the civilisation concerned, independent—at least so far as size, as opposed to the impression of size, is concerned—of the ability of the architect. This consideration leads him, logically enough, to an enthusiastic appreciation of the architecture of Egypt, | an architecture which is indeed impressive from its massiveness, but which attains that impressiveness by an expenditure of material and labour out of all proportion to the result achieved: an architecture, moreover, which is obviously the work of slaves—and those slaves of unparalleled servility—for tyrants characterised by an amazing poverty of invention and a colossal stupidity. The quality of size is the quality which, above all others, is most attainable to-day. Wealth can buy it when it can buy nothing else. The wealthy can appreciate it when they can recognise no other artistic quality. "The Grand Manner" is em-

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<sup>\*</sup> The Mistress Art, pp. 51, 52.
† Bacon, Essay on Building: "Houses are made to live in, not to look on, therefore let use be preferred to uniformitie, except where both may be had."

Presidential Address, 1913, p. 3.

<sup>§</sup> The Mistress Art, p. 166; see also p. 187: "Great size,

or I should say the power of producing the effect of great size in orderly distribution, is one of the essential qualities of architecture. Short of that power I do not think any architecture can be called beautiful; at least it falls below the highest excellence of the Art.' | Ibid., pp. 164, 165.

phatically the style best adapted to the capacities of the capitalist, who to-day makes mainly the effective demand for monumental architecture.

Again, consideration of the fact that Renaissance architecture is a revival of a revival, that "invention and originality will best be shewn in the use you make of these accepted forms "\* rather than in progress towards the evolution of new ones, leads Professor Blomfield to find cause for admiration in the fact that "the Egyptians never changed "†—that the same type persisted for 5,000 years practically unaltered, a consideration, I submit, which should damn any style outright, for, as has been suggested already, progress, or the promise of progress, is essential to the highest form of beauty in architecture.

Again, Professor Blomfield recommends to his students, as one of their chief aims, the recovery of older tradition and a larger intellectual background, through the study of the architecture of Imperial Rome; ‡ and it is a true instinct that leads him to do so—it is that sort of architecture that would fittingly reflect the conditions existing in the modern world.

Again, he notes the dependence of later French Renaissance architects on the wealthy connoisseur, and looks forward, perhaps, to the time when, the wealthy becoming more cultured, such a system may again become operative.§ And here, too, Professor Blomfield has read his age rightly. That vesting of the decision as to what shall be produced, how it shall be produced, and by whom, in the hands of the capitalist instead of the community, began with the great industrial revolution that synchronised with the Renaissance, and is still largely operative to-day.

The question that all Professor Blomfield's arguments evoke, however, seems to have escaped him. One admits freely that the existing situation is admirably analysed, one realises that, given the conditions by which we are bound to-day, the lines he indicates must be followed, but are we to acquiesce in those conditions? We have reviewed the conditions that in the past have found their expression in the great historic styles of architecture; we have determined that Association and Freedom—and one is unattainable without the other—are essential to the highest achievements in architecture. Are we to agree that those essentials are absent to-day, and do nothing more? Are we not only to accept as inevitable the second-rate—and even the work of our greatest men under modern conditions must be second-rate—but in accepting it, glory in our limitations and proclaim that, after all, this commercialised building is "the only manner in which architecture can worthily express itself?"

I submit that it is our duty to turn our backs on those who thus prophesy smooth things, and examine how far there are latent in the existing industrial and social structure of the world to-day the conditions which are indispensable to the true practice of our art, and in what way we can make those submerged forces operative. In the first place, it is obvious that the mere physical difficulties in the way of association between various peoples are far less than they were in the Middle Ages; the discovery of rapid means of communication of all sorts has rendered comprehension of other nations by any one nation possible to an unprecedented extent. The creation of common agreement in essentials among the various communities of the West, for instance, such as was sought to be symbolised in the Holy Roman Empire, is, as far as physical difficulties are concerned, no difficult matter. Again, as in the Middle Ages, so to-day, the worker has found that by himself he is powerless; only by combination with his fellows can he obtain freedom. To identify the Trade Union of to-day with the Guild of the Middle Ages is clearly mistaken. They are different fundamentally both in structure and function. Whereas, for instance, the Guild was an association both of workers and directors controlling the processes of their labour, owning the materials and what they produced from those materials, the Trade Union is an association of workers only, controlling little the conditions or direction of their

<sup>\*</sup> The Mistress Art. p. 151.

<sup>+</sup> Ibid , p. 164.

<sup>‡</sup> Ibid , p. 251.

<sup>§</sup> Ibid., p. 280.

[ Ibid., p. 188.

Ibid., p. 188.

S. and B. Webb, History of Trade Unionism, pp. 14-16.

labour and without ownership of material or product. They have this in common, however, that they embody the same principles of democratic organisation to secure for each the rights that each can only enjoy when they are claimed for all.

Besides these workers' associations, however, the times in which we live have shown an enormous increase in the corporate activities of the community as a whole: more and more is there a tendency for the community (whether the village, town, county, or whole nation) to take out of the hands of individuals and groups of individuals the direction of the enterprises in which it is most directly interested and to vest it in the community.\*

Now it is in this tendency (the existence of which will not be disputed) that I believe the best hopes for the future of our art to lie. Not only by the raising of the status of the workers immediately concerned will the necessary conditions for great architecture be created. By progressively throwing more and more responsibility on the community as a whole for the satisfaction of its needs there will be created that intimate relation between the citizen as producer and the citizen as demanding production, that, as we have seen, is necessary if the highest form of art is to result. Exactly in proportion as any section of the nation is apathetic, unintelligent, degraded, to that extent will its art suffer. "Architecture is the matrix of civilisation." The impress of the community as a whole will be upon it, do what we will.

An architecture that seeks appreciation from the connoisseur only—and Professor Blomfield seems to accept this condition†—is self-confessed a failure. From its very nature great architecture must be the sum of the impulses and aspirations of a whole people. It is a people articulate in stone: its position as greatest of the arts is based on this fact, that it is not the work of individuals for individuals, but of an association for an association, of a community for a community: it is not only an art, but also a utility.

What, then, is the immediate duty of the architect to-day? To attempt to revive mediaval forms is, as Professor Blomfield argues so trenchantly, entirely ridiculous: the conditions that produced them are not in existence to-day. Any attempt, again, to revive the guild of the Middle Ages must be doomed to failure,‡ for sharp divisions of interests between employer and employed outside under the modern industrial system, must necessarily be reproduced within such guilds. Again, Mr. Ashbee's ingenious scheme for creating, as it were, an island in the great sea of competitive production whereon the craftsman may draw breath and find his footing and get a fair start,§ that remedy can hardly be considered adequate to deal with a sickness which is affecting not a class nor a trade, but a whole people. Only by resolutely setting himself to further in every possible direction the principles of freedom and association will the architect be doing his part in making possible a revival of his art.

Only by creating common interests, common ideals, each working for all, and all for each, shall we get, for instance, that harmony in our town architecture the lack of which is so manifest to-day: which could make a street like Holborn, or worse still, the high streets of the suburbs, a coherent whole—infinitely varied in separate parts, but homogeneous in character, instead of two rows of advertisements in stone and brick, each jostling each for precedence and beckoning in frantic endeavours to be first to catch the public eye. Only so shall we avoid the mechanical uniformity of some town-planners that will otherwise be turned to at last by a people worried by the fretful incoherence of their surroundings. A unity achieved not by the free aggregation of similar aims, but by the arbitrary imposition of an individual idea.

Again, it is only by connecting closely the association with its habitation that we can regain once more that abiding interest for our buildings which arises from their intimate participation in the history

† The Mistress Art, p. 126.

§ C. R. Ashbee, Should We stop teaching Art?

<sup>\*</sup> For instance, the Nationalisation of Railways, Municipal Housing, Gas, and Water.

<sup>† 18.</sup> Massiess 314, p. 120. † S. and B. Webb, History of Trade Unionism, p. 117. Note the interesting project of the Builders' Union, 1833, when claborate plans were propounded for the undertaking

of all the building in the country by a National Guild of Builders, each lodge to elect a foreman, and the foremen to elect a general superintendnet. The disappointment of these high hopes was rude and rapid.

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of their possessors. Just as for the individual his home has a peculiar quality of charm, a significance more intense for him than for anyone else, so for the organisation, whatever it be, will its home acquire a more widely extended attraction, just such as the great communal buildings (like the Abbey, for instance) hold now. Instead of the office—a place to be taken and occupied, and left without a pang we should have something corresponding in character to the Guild Hall.\* We might even have churches that would seem to be possessions of the people in the same way that the great guild churches were (the churches at Lübeck, for instance). In large things as in small the good citizen to-day will endeavour to forward "the emancipation of land and industrial capital from individual and class ownership and the vesting of them in the community for the good of all." He will aid every effort of the worker to win by combination with his fellows in democratically organised associations that essential equality between all members of a community which is the life blood of freedom.

For the architect, above all, it is necessary that he should turn from controversies as to styles and traditions, and realise that every style is inevitably the product of the conditions of its age. But he must realise, too, all the time that it is the conditions—changeable, variable conditions—which make the architecture; that we can, each individual of us, change and vary those conditions, and that it is there rather than in any merely technical sphere that the architect will win advance for his art. "If we are to possess a civilisation worth expressing itself artistically," writes a modern architect,† "we must do something besides establishing art lectureships: we must change the conditions of life; the temper of the people."

"The revival of our arts and crafts," writes a modern craftsman, "is obviously and almost solely a political question."

Not in the architectural schools, not in the adoption of any style of the past, not in the study of ancient buildings, necessary though that is, is the line of advance. The triumphs of the future will spring from the attainment, through organisation, by the workers of the world of the one indispensable element of great art—Freedom.

#### BIBLIOGRAPHY.

Only books bearing directly on the subject of the Essay, excluding general historical and other works.

GREEK AND ROMAN PERIODS

Aristotle : Politics.

T. G. Tucker: Life in Ancient Athens.

W. Warde Fowler: City State of the Greeks and Romans.

A. Choisy: L'art de bâtir chez les Romains. T. G. Tucker: Life in the Rome of Nero and S. Paul.

W. R. Lethaby: Theory of Greek Architecture (R.I.B.A. JOURNAL, 8th February 1908).

#### BYZANTINE.

A. Choisy: L'art de bâtir chez les Byzantins. Procopius of Casarea: Of the Buildings of Justinian. Lethaby and Swainson: Church of S. Sophia, Constantinople. Texier and Pullan: Byzantine Architecture.

#### MEDIÆVAL.

W. R. Lethaby : Mediæval Art ; Westminster Abbey. Viollet-le-Duc : Dictionnaire raisonné de l'architecture. Leader Scott: Cathedral Builders.

L. F. Brentano: Origin of Guilds and Trade Unions. J. Toulmin Smith: English Guilds.

Mrs. J. R. Green: Town Life in the XVth Century. E. S. Prior: History of Gothic Art in England.

RENAISSANCE AND MODERN.

Walter Pater: Renaissance.

J. A. Symonds: Renaissance in Italy; Life of Benvenuto Cellini (trans.).

C. W. C. Oman: Great Revolt of 1381.

J. A. Hobson: Evolution of Modern Capitalism; Industrial System.

S. & B. Webb: History of Trade Unionism; Industrial Democracy.

Arnold Toynbee: Industrial Revolution. Karl Marx : Capital.

#### GENERAL.

J. Ruskin: Seven Lamps of Architecture; Stones of Venice. C. R. Ashbee: Should we stop teaching Art?

Morris: Architecture, Industry and Art; Dream of John Ball.

R. Blomfield: Mistress Art; Pres. Address, 1914.

A. Romney Green: Influence of Tools on Design (Arts connected with Building).

L. March Phillipps: The Works of Man. Architecture a Profession or an Art?: Thirteen Essays, ed. T. G. Jackson, R. Norman Shaw.

<sup>\*</sup> Perhaps Unity House—the Home of the National Union of Railwaymen-may acquire such significance. At any rate, it has a more distinctive character than a suite of offices in a great block of similar offices.

<sup>†</sup> R. A. Cram, Gothic Quest, p. 93.

A. Romney Green, Arts connected with Building, p. 97. Blomfield, Presidential Address, R.I.B.A. 1913, p. 7. "We ourselves are, I believe, slowly moving towards the only possible standpoint in gradually concentrating on the tradition of English architecture of the eighteenth century.'

### LONDON'S NEEDS.

T is now some months since the last Report of the Traffic Branch of the Board of Trade appeared, but it is well that some notice of its contents should appear in this JOURNAL. Once again this annual volume (the sixth) takes up the story of London's needs, and takes it up not as a vague cry of discomfort but as a diagnosis. It would be difficult to overrate either the nature of the work upon which Colonel Hellard is engaged or the method upon which that work is conducted. These volumes, which appear so unassumingly, should not be allowed with equal modesty to disappear. Taken as a series, they form a collection of data vital to the study of London's ills and London's remedy.

The Report opens with some general traffic figures, giving striking statistics of the increase both in population and in locomotion. The facts of the last ten years are at least remarkable. It might be supposed that our increased travelling facilities and their use were proportionate to the increase of population. But this is far short of the truth. The population of Greater London has in these ten years increased by less than a sixth, but the number of journeys travelled has been very nearly doubled. In fact, the number of journeys per head of population has risen from 145 to 244.

It is reckoned that by rail alone 400,000 persons enter the metropolitan area every day, and it should be noted that the increase of travel year by year is much greater in the case of tramway and omnibus traffic than in that of the railways. In other words, the road problem is much more acute than the railway problem. It is not surprising in this connection to hear that street accidents are on the increase. During a period in which the population increased 10 per cent. the total number of accidents per annum increased at the rate of nearly 100 per cent.; in fact, "save for a temporary break in 1908 and 1909 the ratio of accidents to population has been steadily increasing." The conclusion derivable from these figures when properly analysed and compared with the statistics of other towns and other countries is that the City of London, as distinct from larger London, is very nearly if not quite the most likely place in the world for a fatal street accident.

Perhaps it is pertinent to reflect that a good many of the people who suffer in street accidents may not be qualified to rank as members of the population of London, and that probably a man (or woman) who is knocked down in the city is more likely to be a country dweller than a unit of the "night population."

But in any case the alarming prevalence of these accidents and their *increase* are sufficient reasons for giving good heed to the admirable series of precautions (twelve in number) which the Select Committee on Accidents put forward in August of last year.

It is instructive to note that the heavy motor car, though only responsible for one-sixth of the number of accidents caused by the motor omnibus, is twice as likely to be fatal.

Of all the maps provided in the Report by far the most interesting is that which indicates the town-planning schemes in Greater London. At the first look this map fills the worst pessimist with hope. He there sees that nearly the whole of London is girdled at an average distance of nine miles from the centre by a belt of land about five miles wide over which the word "Town-planning" has at least been breathed. But, alas! a closer scrutiny shows that in the bulk of this area such breathing, or at most loud whispering, is all that has been dared.

There are, as town-planning experts know, eight stages in the birth of a town-planning scheme under the Act. No area among these coloured tracts had, at the date of publication, reached the final glories of the last two stages. Only one had reached the sixth stage; none was in the fifth. The fourth had five representatives, the third one, the second four, and the first as many as ten.

This first stage is merely that of "consideration as to whether a scheme should be prepared"; the second, not much further advanced, is that of expressing "intention to apply for authority to prepare a scheme." Still, large hopes have often small beginnings, and the best aspiration that we can have for London in respect of its "outer ring," its arterial roads and its circuit roads, is that these patches of diagonal hatching may rapidly proceed from shade to shade to the stage of white spots on a blue ground (signifying a draft scheme), thence to pure blue (submission of scheme to Local Government Board), and finally to those penultimate and ultimate levels of accomplishment for which no colour symbols have yet been invented.

In conclusion, I make, for the third year in succession, my suggestion that the Board of Trade should in this series of admirable maps recognise the existence of Hounslow. Its continued absence from these records may mislead the antiquarians of the future, to whom these Reports will undoubtedly prove of supreme interest.

PAUL WATERHOUSE [F.].

### NEW BUILDING REGULATIONS FOR PUBLIC ELEMENTARY SCHOOLS.

THE new Building Regulations for Public Elementary Schools, recently issued by the Board of Education, mark a distinct step forward in the right direction, and will be welcomed by architects as a charter of freedom. They present no striking innovation in regard to planning or construction; the keynote being one of guiding principle, rather than of fettering restriction, giving ample latitude for individual expression under varying circumstances of site and local requirement.

In a prefatory note, sympathetic in tone and alien

to the frigid formality of an official document, it is laid down that the Regulations do not constitute a standard to which precise conformity is demanded; but rather a means of securing co-operation between the dominant and servient authorities towards the attainment of a common aim. Although the problem of efficiency combined with economy is ever with us, in the case of a Government department it presents a wider aspect, and, having regard to the present state of public opinion, the Board realise the delicacy of the task of creating, without risk of reaction, a desire for every educational advantage combined with the recognition of esthetic considerations as a means to this end.

In substance the Regulations are admittedly the outcome of discussion in many quarters. They put into concrete form the unwritten laws which have for some years influenced school planning, and bear alike the impress of the educationalist, the medical officer, and architect, whose assistance is gratefully acknowledged. It is significant of the trend of recent developments that three out of the four principal modifications of the Regulations—viz., design as affected by ventilation, disposition of the buildings on the site, and facilities for physical development—are chiefly due to hygienic considerations; whilst the fourth, the size and organisation of departments, is educational in character.

In form the Regulations are re-modelled under nine headings, each dealing with a separate branch of the subject, co-ordination being secured by the interpolation of cross references. The new arrangement is a great improvement. Congested areas will be the subject of special consideration, and the needs of individual cases will be decided upon their merits. This procedure will also apply, as heretofore, to existing buildings. Reference is made to the Report of the Departmental Committee on the Cost of School Buildings, but no recommendations of general application are put forward as to the adoption of new materials or methods of building. To foster experiment and meet exigencies which may arise the discussion of plans is invited when these are in the preliminary stage.

#### SITES AND PLAYGROUNDS.

The importance of the site is emphasised by con siderable amplification of the Regulations, which are largely influenced by the recommendations of the Departmental Committee on School Playgrounds. In some quarters the proposals have been criticised as a counsel of perfection; in others as too lenient in their requirements. In both cases one is tempted to think that there is the disposition to regard them from a somewhat local standpoint. If it is remembered that the Regulations are intended as the minimum requirement for general application the need of compromise is apparent, and, in the long run, better results are often achieved by the rejection of extreme measures.

One welcomes the suggestions for improving the amenities of the playground, and the co-operation of teachers and scholars might usefully be secured for the purpose with mutual benefit. A necessary warning is given as to the danger of exits on to main roads. There are cases, however, where they are unavoidable, and the barriers suggested are a great safeguard.

The opinion expressed that south-east is the best aspect for class-rooms will be generally endorsed; but the suggestion that, in the warmer parts of England, east may be a better aspect than south needs careful consideration. In practice it has been found in some cases that, owing to the altitude of the sun in summer, a southern aspect is not necessarily a disadvantage in a warm climate if adequate cross ventilation is provided; and further, in spring less inconvenience is caused by prevalent winds.

The old allowance of a quarter of an acre of ground for 250 children is increased by 20 per cent., and the Departmental Committee's recommendations as to playground areas are adopted, subject in both cases to certain reservations. The proposals made by the same Committee in regard to existing playgrounds, although not made requirements, are not lost sight of when plans are submitted for alterations to existing buildings. Stress is rightly laid upon the necessity of due consideration being given to the shape and laying out of playgrounds, a point which has too often escaped notice in the past, and very necessary restrictions are placed upon the use of playgrounds by girls and younger children alternately where it causes disturbance of teaching.

#### GENERAL ARRANGEMENT OF THE BUILDING.

The division of the school into departments is a question for the Local Education Authority rather than the architect; and although, if properly understood, the information given in Section 18 and Appendix I. is useful, it might easily prove a stumbling-block in the hands of the uninitiated. Suggestions as to planning are wisely non-committal, wherein lies one of their chief merits, but the allpervading importance in this respect of sunlight and ventilation as it is now understood, is insisted upon. The Central Hall type of school takes its congé, and one would also like to have seen restrictions placed upon Central Corridor Schools. The proportion of not less than two class-rooms for every hundred scholars may be thought to err upon the side of leniency, although a certain number of rooms accommodating 48 or 50 scholars undoubtedly gives flexibility in working a department. Plans showing classrooms arranged so that one or more sides may be thrown completely open are invited, and planning will tend increasingly in this direction. The concluding paragraph "harks back" to the need of economy, and threatens prodigal architects with ruthless penalties. Future enlargements of buildings are very properly to be planned as part of the initial scheme.

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#### ACCOMMODATION.

To the accommodation hitherto included in the Regulations are added class-rooms for practical work, rooms for meals, rooms for the use of the school medical officer, and shower or spray baths. These have already been provided in some of the more recent buildings, but the need of them will vary in different localities.

DETAILS OF VARIOUS PARTS OF THE BUILDING.

The requirement that the landing outside of an external door approached by steps should be between the door and top step is impracticable in exposed situations if rain is to be kept out. The writer has had to alter this arrangement in probably more than a hundred cases in old schools, water in some instances having found its way into rooms 20 or 30 feet from the door. The riser of the top step should be under and flush with the face of the door, and the landing placed between this and the top step of the approach flight. In no case within the writer's knowledge has the adoption of this arrangement led to an accident.

The width of staircases is fixed as not less than 4 feet; if this width is exceeded the provision of a central handrail should be compulsory. A flight of 14 steps is undesirable, but may occasionally be necessary.

Mention of verandahs as means of access to classrooms appears in the Regulations for the first time. The use of halls suitably placed for the joint or alternate use at separate times of two departments of older scholars is confirmed, and class-rooms are not to be entered directly from them. The planning

of halls for younger children assumes a new aspect, and should be carefully studied.

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In regard to class-rooms, complete division of classes taught by adult teachers is made compulsory, and the object of main-rooms, hitherto known as school-rooms, is explained. In small schools they are necessary, but often inconveniently planned.

An important modification is made in the height of class-rooms, which is to be in future not less than 12 feet for rooms with flat ceilings and 10 feet to the slope and 13 feet to the ceiling if ceiled at the collar. If corresponding windows are placed on both sides of the room, 11 feet will be accepted if cross ventilation is satisfactorily arranged. The first two are sound concessions, safeguarded by the requirement that no desk shall be more than 20 feet from a window unless the top of the latter is more than 12 feet from the floor. As to the reduction of height below these limits, there should be no theoretical objection, provided the teacher recognises the moral obligation which it imposes. The human factor in a ventilation scheme is an unknown quantity.

Greate latitude in the position of windows is officially recognised, and the essential features of class-room lighting are clearly stated. Perhaps one may summarize them as even and sufficient light for every desk or table, without pronounced shadows, and windows not facing teachers or scholars. If

these conditions are observed and windows are well placed, it is difficult to see why the use of suitably placed fixed skylights should not in some instances be beneficial if heating surfaces are efficiently distributed. The ratio of one-fifth between floor and glass area is adhered to; surely aspect and surroundings should have some influence in deciding the point. The maximum height of the glass line of windows is fixed at 3 feet 6 inches above the floor, which is beneficial alike to lighting and ventilation.

Attention is rightly called to the necessity of grading the height of desks, and the use of long desks in new schools is abolished. Restrictions as to the number of rows of desks are not directly imposed, but the warning is given that long and narrow rooms are

to be avoided.

Rooms for practical work must provide 15 superficial feet of floor area per scholar. The corresponding minimum floor area allowed for handicraft rooms is 30 feet per head, a reduction of 14·4 per cent. This room may in small schools be used also for cookery and laundry work if a small addition is made to the floor area.

The rules as to cookery and laundry rooms are made more comprehensive and definite. It is a requirement that a gas cooking stove shall be accessible on three sides; but it is equally essential and practicable that the coal-range should be similarly placed. Movable tables are recommended, and are certainly more convenient in practice. Rules for combined domestic-subjects centres are added, but do not present any new features.

Rooms for younger children, previously known as infants' rooms, must have a playroom attached; or, alternatively, when the number of children is small, additional floor area as hitherto in one of the rooms. The area per child in the latter case is now fixed at

a minimum of 12 square feet.

It is recommended that cupboards should be designed as part of a building—a small but important

point

Subject to the Board's approval, rooms for midday meals may be provided. The need of these only arises in some localities, and the fact must not be lost sight of that they would sometimes be a great boon in remote country schools.

Where rooms for medical inspection are provided it is stated that space for eye-testing is useful.

The anomaly of cloakrooms of equal size for boys and girls is removed by an increase of 50 per cent. in the hanging space for girls' clothes. It is advised that cloakrooms be lighted from the end; but surely equally good lighting and cross ventilation are obtained by sufficient corresponding windows in the two side walls, with the additional advantage that air would tend to move across and not towards the entrances. The number of lavatory basins is fixed at 4 per cent., a proportion which cannot be described as excessive. A not unimportant addition is the reminder that heating chambers need ventilation.

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Additional office accommodation for girls is asked for. Stress might have been laid upon the need of separate ingress and egress to urinals. These are often planned as "dead ends," whereas ample space for circulation of scholars is as important as in cloakrooms. It is true that an opening at each end of the screen wall of offices is asked for, but this does not always suffice.

The installation of shower-baths or spray baths is permissible in special cases, and provision of this kind may be substituted for part of the scheduled layatory accommodation.

Teachers will welcome the addition of bathrooms to their houses.

### VENTILATION AND HEATING.

The new regulations as to ventilation follow the now generally accepted lines-viz., cross ventilation by means of windows, and air delivered in cubic feet instead of being doled out in cubic inches. We have moved forward since the time when two square inches of inlet at the end of a dusty tube was alleged to admit sufficient air for one child. Increased ventilation in schools is not feasible without adequate reserves of heat properly distributed, and the new rules provide for this. High-pressure water and steam heating are tabooed, and the use of warm-air grates and stoves is not encouraged. The change of policy in regard to the two latter may cause some soreness among Local Education Authorities, who have been put to considerable expense to meet the late requirements, and have in some cases incurred the displeasure of non-provided school managers by pressing the point.

Windows which face the sun are to be fitted with blinds. This rule will, no doubt, not exclude curtains, of some light, washable material, fitted in two heights and operated by cords. These give better control of the light and interfere less with ventilation.

# CONSTRUCTION AND MATERIALS.

There is nothing calling for special comment in this chapter, nor was drastic change anticipated in view of the finding of the Departmental Committee. A minor point, however, is the thickness of stone walls: this, of course, varies in different parts of the kingdom. In those localities of which the writer has had experience 18 inches is the most economical thickness and is ample for stability. If the thickness recommended, 20 inches, is intended to secure dryness, it would in many districts fail to achieve this object, even if the wall were lined with brickwork and pointed in cement, unless an external protective coating were used or the lining was built with a cavity, and the latter is a costly proceeding.

#### PLANS AND PROCEDURE.

A definition of what constitutes a "New Building" would have been useful, but it is stated that the Board have no power to give an authoritative interpretation. Already disputes have arisen upon the point,

#### APPENDICES.

Circular 835, with reference to movable partitions, might with advantage have been added as an appendix, as there is no mention in the Regulations of the important points to which it calls attention.

In conclusion, there are two omissions which occur to one. In the first place it is disappointing to find no mention of open-air schools; but being more or less in an experimental stage, it may have been thought undesirable to lay down precise rules regarding them. Then, too, at a time when schools are being increasingly used for continuation classes, rules for artificial lighting would have been useful, especially in view of the attention which has recently been focussed upon the subject and the efforts now being made to effect improvement in this direction.

In expressing our indebtedness to all who by persistent effort have succeeded in placing school planning upon a sound basis under the official ægis, we, as architects, should gratefully acknowledge the initial efforts of the medical profession towards this end. Now that the principles are defined, it rests with us to apply them to the best advantage.

Exeter. Percy Morris [A.].

#### STRUCTURAL STEEL.

It has often been demonstrated that rolled steel shows higher degrees of strength per unit of sectional area in small than in large dimensions, the reason being that in small dimensions it is subjected to a greater amount of working in proportion to its size. Thus, for example, in high-grade steel having an average ultimate tensile resistance of 40 tons per sectional square inch, I have found the resistance per square inch in  $\frac{3}{8}$  inch bars about 11.5 per cent. more than in  $\frac{5}{2}$  inch bars. But how about mild steel !

Having been engaged for some months past in testing mild steel manufactured by various Scottish firms, I have selected, from nearly 300 tests, eleven made upon steel less than 3 inch thick, and thirty-two made upon steel varying from  $\frac{3}{4}$  inch to  $1\frac{1}{4}$  inches thick. The results are summarised in the following table:—

Thickness of Samples Tested.		Ultimate Tensile Resistance in Tons per Square Inch.		Percentage of Elongation in 8 inches of Length.		
Under 3 in.	. Highest			31.3		27
** **	Lowest			28.2		20
	Average			29.8		23.2
From 3 in.	to 1! in.,	Highest		30.5		30
	**	Lowest		28.1		22
	**	Average		29.6		25.9

So far as this evidence goes, it would appear that no advantage is gained in construction by employing several small-dimensioned members of mild steel in place of a few larger-sized ones, the latter being, of course, more economical.

GEORGE H. BLAGROVE, Licentiate.

# REVIEWS.

#### PR SERVATION OF ANCIENT BUILDINGS.

Thirty-seventh Annual Report of the Society for the Protection of Ascient Buildings; and a Paper read by A. C. Benson, 1-sq., C.V.O., at the General Meeting: June, 1914.

is now nearly 40 years since a few well-deserving men, imbued with a right spirit and shocked by the amount of vandalism perpetrated in the guise of restoration, founded the Society for the Protection of Ancient Buildings. Their tersely cogent statement of guiding principles, which was then drawn up, is reprinted in this Report, and time has amply confirmed its wisdom and truth. At first the small band of true prophets was ridiculed without mercy and dubbed by certain leading architects and other pundits of the time the "Anti-Scrape Society." This nickname—bestowed in derision—through increase of knowledge and understanding, has attained an honourable significance, for it condenses into a familiar phrase an important side of the Society's general aim-viz., to preserve the kindly texture and subdued tones that contribute so enormously to the vital appeal of every memorial of departed time.

The Report itself gives an account of the year's work that is remarkable, as showing the good that has been done with all-too-slender pecuniary resources. The outstanding event of the year is the favourable reception given to a deputation from the Society at Lambeth Palace by the Archbishops of Canterbury and York. The chief points urged on this notable occasion were: that a strong case exists for regulating the action of custodians of sacred buildings in all matters of repair and enlargement. that it is highly important to enforce the law which requires that a faculty be obtained before any given work is undertaken, and that it should be seen that the limits of such faculty are strictly defined and faithfully adhered to. The deputation freely granted that the religious uses of their buildings must be the first consideration of ecclesiastical authorities, but suggested the constitution of an advisory board of specially qualified persons to guide and influence in artistic matters those responsible for the fabrics of cathedrals and churches. The fact that the substitution of cautious repair for drastic forms of socalled restoration would mean considerable economy was duly emphasised. Both prelates welcomed the opportunity of hearing the Society's views. The Archbishop of Canterbury, while promising co-operation with the Society so long as the practical objects for which churches exist were in no way hindered, recalled that the shortcomings of the past had been more the work of experts of the last century than of the clerical and lay custodians of the fabrics. There is truth in this, though many architects could relate stories of misguided clerics and lay authorities which would demonstrate that our profession has no monopoly of sin. But recriminations are not to the point. There is every reason to be gratified by the courteous reception accorded to the deputation by the Arch bishops, and we agree with the Committee that

nothing but good can come of it.

A few examples of its recent activities will illustrate the beneficent character of the Society's influence, for, though in certain cases the wisdom of their own conceit has caused custodians to run counter to judicious advice, many persons in charge of fabrics needing attention have gladly availed themselves of such assistance as can only be given by those who have knowledge and experience. For instance, the work done at Norton Church, Suffolk, in co-operation with the Society, is a splendid example of the patient tenderness and wise conservatism of its methods. We feel sure that an examination of the building after treatment would only support our conviction that the usefulness of the Society cannot be overstated. What was broken has been put together again, and weak places have been unobtrusively strengthened. Nothing is lost that could have been preserved, and the maximum of good has been effected with the least possible intrusion. From Lacenham we get a mixed report. The fine old Guildhall, "the most beautiful piece of civil timber architecture in Suffolk," at great expense and with very good intention, has been so drastically restored that all its old-world charm has been completely lost. Two photographs of this building—one before and one after restoration -are given, and we have only to look upon this picture, then on that, to see what a falling-off has been brought about by a well-meant but misguided zeal. But the Parish Council has sought the advice of the Society in regard to the repair of the early 16th-century Market Cross, and this instance of Lavenham's attitude towards the relics of its past is a most hopeful and exhilarating sign. Similarly, at Dartmonth the Town Council has taken steps to prevent the tenant from removing and selling the panelling from a house in the Butter Walk, and has thus not only preserved its own for the town it represents, but has prevented the possibly barbarous re-erection of the panels in a strange environment. A brief note and two photographs show how an "improvement" has been carried out at Chester Cathedral in total disregard of those principles for which the Society stands. The public authorities at Lyme Regis provide an example of those who are not open to receive the light. Notwithstanding two visits to the town made by a member of the Committee, they have hidden their original 14th-century bridge behind a "mock gothic ferro concrete front." However, the old bridge is still there, and will perhaps be seen again when more enlightened successors of these gentlemen remove the concoction which at present obscures it. The short comment on the harm already done to Oakley Church, Bedfordshire, and the further mischief that is threatened there, should open our eyes to the need for the kind of vigilance exercised by the Society. It is to be hoped the warning contained therein will not be unheeded in this particular case. Here, as so

often happens, the employment of taste would mean saving money besides preventing violation. Again, by a timely remonstrance, the Society has been endeavouring to save Nos. 55 and 56, Great Queen Street, W.C., which are threatened with demolition for the purpose of extending the Freemasons' Hall. These houses, which are exceptionally fine examples of the street architecture of the 17th century, were originally one. It was occupied by James Boswell in the seventeen-eighties, and earlier by Thomas Hudson, the portrait painter, when Sir Joshua Reynolds was a pupil in his studio. Other tenants were Hoole, the translator of Ariosto and Tasso, and Thomas Worledge, the etcher. The outcome of the Society's protest is doubtful, but it will be a thousand pities if these beautiful houses, with their interesting associations, are sacrificed. We must hope the Freemasons will prove worthy of themselves and their own tradition. Proposals, of a kind which the Society deprecates, have been formulated for works to be done at Christ Church Priory, to insert stained glass windows of Mr. Whall's designing in the Lady Chapel and to erect a mock-antique screen at its entrance being among the chief of these. The cociety justly commends the excellence of Mr. Whall's lass, but "does not think the chapel would gain ly its introduction," and we fully endorse its objection to a "reproduction of any screen of a past period." If a screen is really necessary for the purposes of the church, then obviously something good and reticent should be employed. People are very slow to recognise that imitations of a former age are essentially fraudulent, and that it may be better to see the ancient sky through the windows of an old church than to have heaven's light obstructed by devices in coloured glass. The changing hues and the waving of green branches have a sufficient message for the heart that is open to receive it. Finally, at Torrington Church, Yorkshire, an architect, who is a member of the Society, reported that he was about to repair the tower. The Society collaborated with him and the work is to be carried out in a manner that is fully approved. Would that all owners of beautiful old buildings could be brought to follow the wise example of this architect, who appreciated the value of sympathetic counsel. The intelligent reader, pondering these typical examples of the Society's invaluable work, will not need to be reminded that every member added to its body increases both its moral weight and its monetary resource. No campaign can successfully be carried on without a united enthusiasm and the sinews of war.

We have little space to speak of the address, on "The Beauty of Age," delivered by Mr. A. C. Benson before the General Meeting, and printed with the Report. In this admirable paper Mr. Benson, with his habitual clarity of language and a penetrating sympathy, brings us very near the inmost secret of Antiquity's peculiar charm. He does not forget that beauty of form which consists in an "inevitable" rightness of line and a due proportion, but he dwells chiefly on those romantic phases of suggestive be cuty which he sums up in the word Association. He sees the narrowness and futility of pinning one's faith to some exclusive school, and has nothing to say for those who seek æsthetic or spiritual nourishment from anæmic imitations of the 14th century. But all those qualities of an ancient house that tell of the jovs and sorrows, the fallings-out and reconciliations, it has sheltered through succeeding generations, and all those features which speak of the bygone enthusiasms and mortal idiosyncrasies of him who built it, with the expressive additions of subsequent possessors, go straight to his heart. A time-worn church brings thoughts of the continuous life that destiny has gathered round it, of the childish games and diffident courtships its tower has looked tolerantly down upon. and in the background are the marriages and deaths its muniments record, while the grass that surrounds it seems to cover the frailties of those who have found their rest as with a cloak of charity. It is true, as Mr. Benson sanely remarks, that such reflections, overindulged, may degenerate into a morbid sentimentalism, but in a degree they come to most of us, and undue sensibility is not a conspicuous danger of modern life.

Getting and spending, we lay waste our powers,

and when we remember the humanising influences that proceed from the venerable survivals that enrich our country, we have a deepened sense of the incalculable value of the Society's work and of our obligation to support it to the extent of our power. Mr. Benson has done a great service by so eloquently expounding the meaning and the mystery of Association.

In a letter that is printed in the Introduction M. Rodin says :-

Quel dommage que les fils osent défaire les œuvres de leurs pères : mais c'est la vie des vivants. Quel abus de la force de

This is a sentiment completely in accord with Mr. Benson's ripe and sensitive reflections, and we would earnestly impress it upon all who come within the scope of our influence.

S. Perkins Pick [F.].

#### Books received.

- Catalogue of Books relating to Architecture, Construction, and Decora-
- Catalogue of Books relating to Architecture, Construction, and Decoration in the Public Library of the City of Boston. Second Edition, with an additional section on City Planning. Imp. 8o. Beston, 1914 [Published by the Trustees.]
  Bell Towers and Bell-Hanging: An Appeal to Architects. By Sir Arthur Percival Heywood, Bart. M.A. With Contributions by Edwin H. Levis, M.A., and E. Alexander Young, A.R.J.B.A., and others. 8o. Lond. 1914. 2s. net. [Longmans, Green & Co., 39 Paternoster Row.]
- Transactions of the Edinburgh Architectural Association. Vol. VIII. 8c. Edin. 1914.
- So. Edin. 1944.
   Academy Architecture and Architectural Review. Vol. XLV. 1944.
   [Alex. Koch & Sons, 44 Doughty Street, W.C.]
   Town Planning for Australia. By George A. Taylor. With 109.
   Illustrations, and Introduction by John Sulman, F.R.I.B.A. 40.
   Sydney, N.S.W. 1914. [Building Limited, 17 Grosvenor Street,
   Sydney. Sydney.] Board of Education.—Building Regulations for Secondary Schools,
- being Principles to be observed in Planning and Fitting up New Buildings in England. (His Majesty's Stationery Office.)



9 CONDUIT STREET, LONDON, W., 29th August 1914.

#### CHRONICLE.

#### Architects and the War.

A Special Meeting (open to the whole profession) was held at the Institute on Friday, 14th August 1911, at 4.30 p.m., to consider the best way in which the services of architects can be utilised during the war. The President, Mr. Ernest Newton, A.R.A., was in the chair.

The President's letter convening the meeting was in the following terms:—

9 Conduit Street, W., 11th August 1914.

Six,—The following suggestions have been made to me of ways in which architects could be of assistance at the present time:—

1. By offering their services to the Government, either collectively or individually, in connection with the building, equipment, inspection, and maintenance of temporary barracks, hospitals, etc., or for any other kind of work which they are qualified to perform.

2. By arranging to look after the work of young architects who are already called out, or who contemplate joining the

Forces.

3. It has also been suggested that a Subscription List be opened to enable architects to contribute as a body to The Prince of Wales's National Relief Fund.

The Institute is proposing to act in conjunction with the Architectural Association, which is already moving in the

A Meeting will be held at No. 9 Conduit Street on Friday, August 14th, at 4.30 p.m., for the consideration of these and any other suggestions.—1 am, Sir, &c.,

ERNEST NEWTON, President.

The President, in opening the meeting, said: I should like, before we consider the business which has brought us together, to state that, after the numerous communications which I have received, I felt it was necessary to get to work without loss of time. I was, therefore, unable to call the Council together before summoning this meeting, and they will, I feel sure, consider I have done right in not losing time. (Hear, hear.) I am proposing to ask them to meet as early as possible.

The specific services to be suggested under No. 1 of the circular which you have received are intended as indications only. There are, of course, many others, which we as architects can offer, apart from those which we can give as citizens. We can, for instance, offer assistance in regard to the proposed housing and other schemes. It has also been suggested that, subject to the approval of the Council, we might offer our ground-floor galleries. The Architectural Association has already a

good deal of information as to other work which we might do, and I will presently ask the President, Mr. Maurice Webb, to give you an outline of what they are doing.

With regard to No. 2, no explanation is necessary. Many young architects have left their work, with nobody to look after it in their absence, and we must, of course, help them.

I shall presently ask Sir Aston Webb to move No. 3; and I will, therefore, not anticipate him in saying anything about the proposal, except that the Council will be asked to send a donation from the Institute. (Hear, hear.) I have not yet had an opportunity of learning if the Architects' Benevolent Society has adequate funds at its disposal, and whether an appeal for subscriptions should be made.

It will be necessary, in order to carry out these proposals, to appoint a representative Committee, which should have power to add to its numbers, and to form Organising Committees to deal with different branches of the work. I propose to call a meeting of this Committee next Tuesday.

I think it will simplify matters if we have formal resolutions covering suggestions 1. 2, and 3, and the appointment of this Committee, and it will also save time if any gentleman who has suggestions to make will make them briefly now, and then send them at once, in writing, to the Secretary of the Institute, in order that they may be considered by the Committee.

I will ask Mr. Maurice Webb to give the meeting an outline of the valuable work which the Architectural Association has already done, and I shall then ask Mr. Hubbard formally to move the first resolution.

Mr. Maurice Webb: I should like first, on behalf of the Association, to say that we are anxious to help and assist the Institute as far as we possibly can in any proposals it may bring forward. As regards the actual work which we are doing at the moment, we are endeavouring to get into touch with all men who feel they would like to do something to help at the present time: men who can only give up part of their time, and also men who have tried to join the Territorial forces, but owing to the fullness of their ranks have not been able to get in at present. But we are not able to do anything, and we do not wish to do anything, which will interfere with the regular recruiting, either for the Army, or for the Territorial Forces later on. For this purpose we propose to affiliate ourselves with a central organisation. called the London Volunteer Defence Force, which, I understand, expects shortly to obtain Government recognition. Lord Desborough is the Chairman, and it is supported by a very influential Committee. Their scheme is to start training centres all over London, and we shall form one of those centres for men who can only give up part of their time, having drills and musketry practice every night, and at other times as may be arranged. For men who can give their whole time I hope we shall provide a fuller and better system, and that we shall be able finally to supply a complete company of men who are willing to give their whole services and affiliate themselves with the Artists' Rifles, or with some Engineering Territorial battalion, as soon as we are allowed to go on. But at the present time there is no further recruiting for the Territorials, I understand. For the part-time men we shall have to go on until things develop a little more. At present we have the names of 250 men who are willing to do something, and more are daily coming in.

We have rifle ranges at our disposal, a drill hall and drilling grounds, and we have our own cricket ground at Elstree, which, later, we shall be able to use for week-end camps. As far as the Association goes, I think that is the best side of the work for us to tackle. All men over 30 and up to 45 are eligible; and I hope that later the younger men will be; but at present we cannot drill them if they are eligible for Lord Kitchener's Second Army. In addition, we are endeavouring to help the British Fire-Prevention Committee, for men who are less martial-spirited and who would like to join an Emergency Fire Force and who are versed in fire work and dangerous structure work, for either part time or whole time. I cannot say anything further, except that our Secretary is here, and he has full particulars of what we are doing, and will be pleased to take the names of any who are willing to help us. (Applause.)

The President: I will now ask Mr. Hubbard formally to move the first resolution.

Mr. Hubbard: The resolution which has been entrusted to me is as follows:

"That this representative meeting of the Architectural Profession offers its services to the Government in whatever capacity they can be most useful at the present time. Also that, subject to the consent of the Council, the R.I.B.A. offers to the Government the use of the Institute's ground-floor galleries; and that an intimation giving effect to these offers be forwarded to the proper quarters." I beg. Sir. to formally move that resolution.

Mr. H. W. Wills: I shall be pleased to second it.

Mr. Alan E. Munby: I have been asked by a gentleman who is not able to be present, but who has been a member of the Council for many years, to say that the Institute should take into consideration the fact that by offering services to the Government we may possibly be doing people out of work. The resolution has not been moved quite in the terms in which it is printed; therefore its scope is not as wide. But that is a possible point of view, and I promised to put it forward—namely, that there might be people who have work in hand and whose services might be dispensed with if we made a carle blanche offer to the Government.

THE PRESIDENT: The intention is to offer advisory services as far as possible, and to get the Government, if we can, to spread their work, which is done in departments now, amongst those architects who will be very much pinched. We are offering what services the Government may require from us, but we do not wish to take work away from architects, but rather, if possible, to increase it.

A Member: May I ask if we are offering services, or are we asking for work?

The President: We are offering services.

Mr. H. V. Lanchester: I support that resolution, and I would like to ask the Chairman to put it.

The resolution was then put and carried unanimously. The President: I now call upon Mr. Gotch.

Mr. J. Alfred Gotch: I have much pleasure in proposing the second resolution: "That the architects who are in a position to assist young architects who are already embodied in or who contemplate joining the Forces, be asked to send their names to the Secretary of the Institute, and state what they are prepared to do." I do not propose to say anything in support of this, because it is so obvious. My view is that, as far as possible, everyone should endeavour to keep things in their normal state. If young architects have gone to join the Colours and left

their business, we ought to depart so far from the normal as to help them as far as we can.

Mr. E. Guy Dawber having seconded, the resolution was put to the meeting and carried unanimously.

The President: I will now ask Sir Aston Webb to move Resolution No. 3.

SIR ASTON WEBB, R.A.: The resolution I have to propose reads: "That a subscription list be open I to enable architects to contribute as a body to the Pring of Wales's National Relief Fund." The idea is that the Institute should open a fund and receive subscriptions which architects may choose to give, here, instead of sending direct to the Fund. I hope the Institute will give a contribution as from the Institute. Our list will be open for small sums, as small as is wished, and as large as anyone likes. It seems to be the right thing, and is what is being done generally.

Mr. Lanchester: I will second the resolution. I understand that it says "architects," not necessarily members of the Institute?

SIR ASTON WEBB: Architects; yes, certainly.
THE PRESIDENT: I think Sir Aston Webb has made
it quite clear. The idea is that a subscription list should
be opened, so that architects may contribute as a body,
more or less, and the Institute will be asked to give a
donation, too. It answers two purposes: one is to have
as large a sum as possible given to the Prince of Wales's
Fund—a large sum, we hope; and the other is to enable
people who feel they can only give a modest sum, to give
it in this way rather than sending it direct. Very often, if
a man felt he could only send a small sum, he might
hesitate about sending anything at all, and so the Central
Fund would lose his subscription; but he would not mind
sending it here, because it goes out as a Fund, without

names and without amounts—simply a total.

Mr. Gerald Horsley: I believe there are some members who have already sent subscriptions to the Fund, and I was wondering if those members might be allowed to send in any additional subscriptions they can afford to a fund for the assistance of the wives and families of architects who may require it in their absence at the front.

The President: Perhaps those cases would be better served from the Architects' Benevolent Society? I do not think it was the intention to ask people to give twice, unless they feel very much disposed to do so. Those who have contributed locally to the Fund, or directly to the Central Fund, would not be expected to contribute again. But I suppose something will be done for the wives and families. I may mention here that I do not know how the Benevolent Society's funds stand at the present moment. Probably an appeal for subscriptions to that fund will be necessary later, and anyone who felt disposed would perhaps like to give to that, instead of giving twice to the Prince of Wales's Fund. If nobody wishes to say any more on that point, I will put that resolution.

Mr. Keen: I suggest there should be a date fixed for the receipt of these subscriptions. If the amount is to be sent in in a lump sum, it should be done by a certain time. The President: Do you mean a date after which

subscriptions would not be received?

SIR ASTON WEBB: I think it would be a pity to do that. We cannot tell how long the war will last, and we are not specially going to send it as coming from us; it is merely that we all want to help this Fund; we do not want to have a big fund, so as to make a splash; we merely

want to help it as far as possible. And if the necessity increases, I am sure we shall be sending further sums.

THE PRESIDENT: The Fund will be open, and con-

tributions will be made to it from time to time.

MR. R. GOULBURN LOVELL: In all probability we should get a better result and greater unanimity in the ranks if we could know the constitution of the Committee which will deal with this Fund; and if the Council of the Institute can form itself into a Committee-we do not want to call it a War Committee-to deal with emergencies of members of the profession in a broad way, and ask for representatives from other Architectural Societies, from the Licentiates and the unattached members of the profession, we can claim that the Committee represents the whole profession, and we might set to work and ask all architects to do what is set out here, to place our brains and services at the hands of the Government and the Local Authorities. My home is at Eastbourne, and I find ladies interesting themselves in putting up hospitals; if it could be arranged that architects should give their services to help such movements, they could do a great service. When we combine architects on this Committee, I feel we are doing two things: we are uniting the profession, the members of which we are very anxious to get at, and we go forward with a solid front. Therefore I think this subscription should be kept at a minimum fee—half-a-crown if you like-though that would not mean that subscriptions were restricted to that sum. I feel that if the Committee were formed on the lines I suggest, and were handled throughout the country, we might get all the 8,000 architects on the list, each having given 2s. 6d.; and we should have these eight thousand willing to give their services, or to help those who are unable to give services. Therefore the feeling I have in regard to the subscription which is being asked for is that it will depend a great deal on the Committee; and if I am in order, I would move the constitution of the Committee.

The President: You are searcely in order in doing that at the present moment. We are on the question of a subscription list being started. The question of the

Committee is the next item.

The resolution having been put, was carried unanimously. The President: The next resolution I have to propose myself—namely "That a Committee be appointed to deal with the matters connected with the foregoing resolutions, this Committee to have power to add to its numbers, and to form such organising committees as may be required, the Committee to report to the R.I.B.A. Council from time to time." If anyone will second that I shall be glad.

Mr. E. GUY DAWBER seconded.

Mr. Lanchester: Can we pass that, and then go on

to the constitution of the Committee?

THE PRESIDENT: This meeting is so big that if we attempted to constitute a Committee I do not know how long we should be at it. I think if anybody has views with regard to the constitution it would be better that he should give the meeting the benefit of them, and if you will trust me to work in conjunction with the Council in forming a Committee on the lines that, judging from the conversation in this room, I gather that it should be formed, I think that would be the best way of going to work.

SIR ASTON WEBB: I think the best Committee would be formed by yourself, Sir, on the understanding that it is not limited to members of the Institute, but that it will include representatives from all known Architectural Societies. (Hear, hear.) I feel sure you have the confidence of everyone in this room that you will carry out that duty honourably and to the satisfaction of all of us. I should like to see it placed in your hands. (Loud applause.)

The President: That is putting a great responsibility on me, but I will undertake to do the best I can, with the assistance of my Council. I will, therefore, put that resolution, which I have proposed from the chair, and

which Mr. Dawber has seconded.

Mr. Lanchester: That does not preclude the appointment of outside architects?

THE PRESIDENT: No.

The resolution was carried unanimously.

MR. EDWARD P. WARREN: I ask if the Committee, in drafting the offer to the Government, will specify, for the benefit of the War Office, the kind of service that our members could render, because some of them have special experience in various directions: some in connection with hospitals and barracks, for instance-which would make them useful in connection with such buildings, and others in connection with engineering-so if some kind of classification could be made, it would be useful in sending the offer to the War Office. Before your intimation arrived, I had sent in my name to the War Office with regard to temporary hospitals and the conversion of buildings, because I happen to have had some experience in that kind of work; and I have also a little locus standi in being an officer of the National Reserve. I received a polite intimation of thanks for the offer, saying it had been noted. I have not, so far, heard anything further. Unless some definite statement is made as to the kind of service to be rendered, the offer may not receive the attention it should.

The President: I have already received several valuable suggestions. In the early part of the meeting I asked anybody who had suggestions to send them in writing to the Secretary of the Institute, so that they may be considered by the Organising Committee. They will then make a précis, and form lists of men who are able to do certain works, and specify the works which they will undertake to do. An intimation to that effect will be

forwarded with the offer of services.

MR. LANCHESTER: I think probably one of the first duties of the Organising Committee will be to circularise architects throughout the country; and we might take advantage of that circularising to ask them in what form

they would like their names to be put down.

THE PRESIDENT: I cannot say exactly in what way the Committee would work, but I imagine it would work in that way: to circularise people, or ask the building papers to insert a notice. Of course, we shall take steps to give full information. We shall not rely upon people writing: they might forget it. I am much obliged to you all for attending this meeting.

The meeting then terminated.

#### The Architects' War Committee.

The first meeting of the Architects' War Committee was held on Tuesday, 18th August 1914. There were present Messrs. Walter Cave, Thomas E. Collcutt, G. Leonard Elkington, Claude Ferrier, H. M. Fletcher, L. Rome Guthrie, Edwin T. Hall, Gerald C. Horsley, Sir Thomas Jackson, Bart., Ralph Knott,

H.V. Lanchester, Col. F. S. Leslie, R. Goulburn Lovell, Edwin L. Lutyens, Sir Alexander Stenning, Sir Henry Tanner, Percy B. Tubbs, Paul Waterhouse, Adam F. Watson, Sir Aston Webb, Maurice E. Webb, John E. Yerbury, C. Stanley Peach (Hon. Secretary), and Ian MacAlister (Secretary). In the unavoid ble absence of the President, Mr. Ernest Newton, R.A., owing to a domestic bereavement, Mr. H. V. Lanchester took the Chair.

Membership of the Committee.—The Chairman stated, on behalf of Mr. Ernest Newton, that in accordance with the Resolutions passed at the representative meeting of architects held at the Institute on 14th August, the following gentlemen had been invited to serve upon the Committee:—

R.I.B.A.; Mr. Ernest Newton, A.R.A., President; Messrs. A. W. S. Cross, George Hubbard, F.S.A., H. V. Lanchester, and J. Alfred Gotch, F.S.A., Vice-Presidents; E. Guy Dawber, Hon. Secretary.

Presidents of Allied Societics.—Messrs. A. H. L. Mackinnon (Aberdeen Society of Architects), G. Salway Nicol (Birmingham Architectural Association), G. C. Awdry (Bristol Society of Architects), J. Archibald Lucas (Devon and Exeter Architectural Society), G. P. K. Young (Dundee Institute of Architects), T. Forbes Maclennan (Edinburgh Architectural Society), G. P. K. Young (Dundee Institute of Architects), T. Forbes Maclennan (Edinburgh Architectural Association), John Watson (Glasgow Institute of Architects), Sir William Portal, Bart. (Hampshire and Isle of Wight Association of Architects), R. Caulfeild Orpen, A.R.H.-A. (Royal Institute of the Architects of Ireland), Albert E. Kirk (Leeds and Yorkshire Architectural Society), W. A. Catlow (Leicester and Leicestershire Society of Architects), J. Alfred Gotch, F.S.A. (Northamptonshire Association), H. Gill (Nottingham and Derby Architectural Society), A. F. Watson (Sheflield Society of Architects), Glendinning Moxham (South Wales Institute of Architects), Glendinning

Architectural Association.—Mr. Maurice E. Webb, President; Messrs. H. Austen Hall and G. Leonard Elkington, Vice-Presidents; Mr. H. P. Fletcher, Hon. Secretary.

Society of Architects.—Mr. Percy B. Tubbs, President; Messrs. E. C. P. Monson and R. Goulburn Lovell, Vice-Presidents; Col. F. S. Leslie, R.E., Hon. Secretary.

Presidents; Col. F. S. Lesle, R.E., Hon. Sceretary.
Messrs, T. W. Aldwinckle, J. Maevicar Anderson, Herbert
Baker, Reginald Blomtield, R.A., Walter Brierley, F.S.A.,
Sir John Burnet, R.S.A., Messrs. Walter Cave, Basil Champneys, H. Chatfeild Clarke, Max Clarke, Thomas E. Colleutt,
T. Edwin Cooper, Claude W. Ferrier, the Earl Ferrers, F.S.A.,
H. L. Florence, Sir Ernest George, A.R.A., Messrs. W. Curtis
Green, L. Rome Guthrie, Edwin T. Hall, Henry T. Hare,
G. T. Hine, Gerald Horsley, Sir Thomas Jackson, Bart., R.A.,
Mr. Ralph Knott, Sir Robert Lorimer, A.R.S.A., Messrs. Edwin
L. Lutyens, A.R.A., C. Stanley Peach, Sydney Perks, F.S.A.,
W. E. Riley, John Slater, Lewis Solomon, Sir Alexander
Stenning, Mr. Leonard Stokes, Sir Henry Tanner, C.B.,
Mr. Paul Waterhouse: Sir Aston Webb, C.B., K.C.V.O.,
R.A.; Messrs. Wm. Woodward, John E. Yerbury, Ian
MacAlister, Secretary.

Messages were read from the following gentlemen regretting their inability to accept the invitation:—
Messrs. H. B. Measures, F. B. Dunkerley, Gilbert Fraser,
Sir William Emerson, A. B. Burleigh.

It was thereupon RESOLVED that the following gentlemen be also invited to serve upon the Committee:—Messrs. J. E. Still, F. H. Wreneh, Walter Gordon, Geoffrey Norman, S. D. Topley, H. A. Welch, Herbert Shepherd, W. Alban Scott, T. Wallis.

Name of Committee.—It was Resolved that the Committee be called "The Architects' War Committee."

Officers of the Committee.—It was Resolved that the

following members of the Committee be appointed as Honorary Officers:—Chairman, Mr. Ernest Newton, A.R.A.; Vice-Chairmen, Messrs, George Hubbard and Percy B. Tubbs; Hon. Secretary, Mr. C. Stanley P. ach, Work of the Committee —The Secretary, submitted to

Work of the Committee.—The Secretary submitted to the Committee the following Resolutions passed at the representative meeting of the profession on 14th August:—

- Resolved, that this representative meeting of the architectural profession offers its services to the Government in whatever capacity they can be most useful at the present time. Also that, subject to the consent of the Council, the R.I.B.A. offers to the Government the use of the Institute's ground floor galleries; and that an intimation giving effect to these offers be forwarded to the proper quarters.
- Resolved, that the architects who are in a position to assist young architects who are already embodied in, or who contemplate joining the forces, be asked to send their names to the Secretary of the Institute, and state what they are prepared to do.

state what they are prepared to do.

3. Resouved, that a subscription list be opened to enable architects to contribute as a body to the Prince of Wales's National Relief Fund.

- 4. Resolver, that a Committee be appointed to deal with the matters connected with the foregoing Resolutions, this Committee to have power to add to its numbers, and to form such organising Committees as may be required, the Committee to report to the R.I.B.A. Council from time to time.
- Resolved, that the President of the R.I.B.A. be empowered to form the Committee.

The Chairman stated, on behalf of Mr. Newton, that the question of the use of the R.I.B.A. Galleries would be discussed at a meeting of the R.I.B.A. Council the same afternoon. He also read the following communication from Mr. Newton:—

"I hope to have an interview at an early date with Mr. Herbert Samuel, M.P., to discuss the question of the special employment of architects during the War. Mr. Samuel has already informed me that he will be glad to avail himself of our services if occasion arises.

"With regard to Resolution No. 3: I propose this afternoon to ask the Council of the Institute to make a substantial donation immediately to the Prince of Wales's Fund.

"With regard to the distress which may arise in the profession owing to the war, I propose to summon a Special Meeting of the Architects' Benevolent Society Council to consider the situation, and, if it is found necessary, to send out a special appeal to the profession to contribute to a Special War Relief Fund for the benefit of architects and those dependent upon them who may be in difficulties owing to the war."

Appointment of Executive and General Purposes Committee.—It was Resolved, that the following gentlemen be invited to act as an Executive and General Purposes Committee, with power to add to their numbers:—Chairman, the President; Vice-Chairmen, Messrs. George Hubbard and Perey B. Tubbs; Hon. Secretary, Mr. C. Stanley Peach; Messrs. H. V. Lanchester, J. Alfred Gotch, Maurice Webb, H. Chatfeild Clarke, Claude Ferrier, Edwin T. Hall, Sir Aston Webb, W. E. Riley, Ralph Knott, L. Rome Guthrie, Paul Waterhouse, E. T. Richmond, H. M. Fletcher; and all the provincial members of the General Committee to act as Correspondents for the Executive Committee. It was Resolved, that all suggestions received from architects and others with regard to the action to be taken by the profession

should be referred in the first instance to this Committee for consideration.

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The Chairman stated that it was proposed to ask the Institute Council to afford all the necessary secretarial and clerical assistance to the Architects' War Committee and its Sub-Committees.

Resolution No. 1.—It was RESOLVED, that the Executive and General Purposes Committee be instructed to draft and despatch to the Rt. Hon. J. Pease, M.P., who has been entrusted by the Cabinet with the duty of receiving all offers of assistance in connection with the war, a letter embodying the general offer of help expressed in the Resolutions.

Resolution No. 2.—It was Resolved, that the following gentlemen be invited to act as a Selection Sub-Committee or Sub-Committees with power to add to their numbers:—Sir John Burnet, Sir Aston Webb, Mr. J. Alfred Gotch, Col. F. S. Leslie, Messrs. E. Guy Dawber, G. Leonard Elkington, Reginald Blomfield, Max Clarke, H. A. Welch, Sydney Perks, T. Edwin Cooper, Wm. Woodward, John E. Yerbury, Henry T. Hare, G. T. Hine, John Slater, R. Goulburn Lovell, Gerald C. Horsley, Alan E. Munby, and all the provincial members of the General Committee to act as Correspondents for the Selection Sub-Committee. It was Resolved, that the following memorandum prepared by the Chairman be adopted as a basis for the work of this Sub-Committee, which should report to the Executive and General Purposes Committee:—

This Sub-Committee would be asked to compile lists of architects, with particulars of their qualifications, so that we may be in a position to give useful information to the Government or to any of its departments in connection with emergencies arising out of the war.

"The Sub-Committee would also act as an Information Bureau to help young architects who are called out for service in the manner suggested by Resolution No. 2.

"In doing their work the Sub-Committee would be largely guided by the advice and knowledge of the provincial members of the General Committee, who would be asked to act as its Correspondents in dealing with applications from various districts."

Resclution No. 3.—It was Resouved, that the Executive and G. neral Purposes Committee be instructed to open a subscription list to enable architects to contribute as a body to (a) the Prince of Wales's National Relief Fund. or (b) a Special Fund.

Benevolent Sub-Committee.—It was Resouved, that the following gentlemen be invited to act as a Benevolent Sub-Committee, with power to add to their numbers:—Sir Robert Lorimer, Sir Alexander Stenning, Sir Ernest George, Sir Henry Tanner, Sir Thomas Jackson, Messrs, A. W. S. Cross, H. W. Wills, H. Austen Hall, H. M. Fletcher, E. C. P. Monson, Herbert Baker, Walter Cave, Thomas E. Colleutt, Edwin L. Lutyens, Leonard Stokes; and all provincial members of the General Committee to act as Correspondents for the Benevolent Sub-Committee

Military Training.—The Acting-Chairman stated that, after consultation with the War Office, the Architectural Association had decided for the present to take no action in regard to their military training proposals.

Executive and General Purposes Committee.—It was finally RESOLVED, that the Executive and General Purposes Committee be requested to consider the following points:—

(A) The desirability of issuing to the profession or to the public an appeal to carry on building work to the utmost extent during the progress of the war.

(B) The desirability of urging the Government to make arrangements to allow the railways to carry building materials.

The Council of the Institute, at a meeting held later in the day, passed a resolution that a donation of one hundred guineas should be made to the Prince of Wales's National Relief Fund.

With regard to the suggestion in the second part of Resolution No. 1, the Council came to the conclusion that as it is their aim to carry on the work of the Institute as usual, and the entire premises are needed for this purpose, they did not think it advisable to offer the Galleries to the Government for military use.

# War Contingencies: Proposed Endorsement of Tenders.

A circular letter in the following terms has been addressed by the Institute of Builders to master-builders and various bodies engaged in the building trade:—

"In view of the international crisis now existing, and of the inability to foresee what may happen, it has been decided to advise that in all future building undertakings members should endorse all their tenders with the following provise:—

This tender is based upon the normal rates of wages and materials prevailing prior to the 4th August 1914, and any advance in cost of labour or material to be added to the amount of the contract, upon satisfactory proof being given of such increase. Any difficulty or delay in obtaining labour or material to be the subject of a reasonable extension of time.

"It is with no desire to secure increased prices or to take advantage of the present crisis that this recommendation is made, but as a precaution against possible eventualities which I am sure you will appreciate."

The Institute of Builders having sent a copy of the above letter to the R.I.B.A. and expressed the hope that it would meet with the approval of members, the Council have replied that the R.I.B.A. could not agree to a circular in such vague terms as the one under consideration, which would not afford building owners any reasonable guarantee either as regards cost or time of completion. The Council add that they have no doubt that individual architects will do their best to induce their clients to appreciate the position of the builders.

#### Members with the Services: Names wanted.

It is desired to place on record in the JOURNAL the names of Members and Licentiates of the Institute who have responded to the call of duty and are serving with the Regular or Territorial forces of the country. Members, or non-members, who are able to supply information on the point are requested to send particulars to The Secretary R.I.B.A., 9 Conduit Street, London, W.

Count Plunkett [Hon. A.], Director of the National Museum of Ireland, has joined the Irish Volunteers, and has authorised many members of his Museum staff to enter for a course of military engineering in the Royal College of Science, Dublin.

#### Government Building Work and the War.

The following communication has been received from the First Commissioner of His Majesty's Works: - It appears from various inquiries addressed to the Commissioners of Works that there exists some apprehension lest unemployment should be increased in the building and other trades by suspension during the present crisis of building and engineering operations provided for in the estimates of the Office of Works recently approved by Parliament, It is, therefore, desirable to state publicly at once that it is the intention of the Commissioners of Works to proceed with all services in their charge, to employ as many men as possible to carry out such services, and to develop and expedite their building programme in any way practicable. As the Minister mainly responsible for Government building, the First Commissioner of Works would wish to take this opportunity of expressing his sincere hope that private individuals, companies, firms, and contractors will spare no effort to follow the policy of the Government in this matter, so far as circumstances admit.

### The Great Western Road.

The Middlesex County Council have decided to proceed immediately with the construction of the Great Western Road. Direct labour will be employed as far as possible. The Council has also decided to put in hand improvements to road surfaces, and to begin the erection of a new sanatorium without delay. The Great Western road, which is to be 80 feet wide and between five and six miles in length, will connect Chiswick High Road with the main Bath Road near Lavender Cottage viā Brentford, Lampton, and Sutton. It will cost about half a million sterling, of which 75 per cent, will be provided by the Road Board, and a time-limit of seven years is allowed for its construction.

#### Architects and Relief Works.

Mr. C. H. B. Quennell [F.], writing to *The Architect's and Builder's Journal* with reference to the relief works now in contemplation, says:—

The Government should be advised that architects need a certain amount of sustenance, and be asked, where possible, to employ architects on relief works.

There is a great danger at the moment that local authorities may start building cottages without any thought of the town-planning side of the question. It is quite conceivable that two or three fields will be bought and cottages built wholesale and without any regard for the amenities of the district. Panic building now without any consideration for all that is held to be meant by town-planning can only result in slums for the future.

In the Report which was issued by the Departmental Committee appointed by the President of the Board of Agriculture to report on buildings for small holdings, this was very evident. The main endeavour was to find the model plan for a cottage. This was assiduously sought from landlords, architects, and agents, and the keynote of their endeavour was to get a sort

of stencil plate for a cottage which could be rubbed off and produced in large quantities by any official.

The Report takes no heed of the town-planning sides, and makes no note of newer forms of traction which may alter conditions. It does not realise that these altered conditions may so change the mode of life that the stock pattern cottage may not be suitable in a few years.

There is a great danger that this Report will be adopted and cottages built wholesale; meanwhile the architect. Laving given his plans, may find his occupation gone.

#### Tattershall Castle.

Lord Curzon of Kedleston [Hon. F.] formally opened Tattershall Castle, Lincolnshire, on Saturday, the 8th inst., when some two hundred guests, among whom were Sir Henry Howorth. President of the Royal Archæological Society, Lord Brownlow, Lord Winchilsea, Sir W. St. John Hope, and Mr. J. A. Gotch, F.S. A. representing the Institute, inspected the Castle under Lord Curzon's leadership. In welcoming the company in the Guard House. Lord Curzon explained his purchase of the Castle and the object of its restoration as an ultimate gift to the nation and the public, and paid a high tribute to the skill of his architect, Mr. William Weir, in carrying out the work of restoration.

It will be remembered that three years ago the public learned with a shock that the famous old landmark of the fens had been purchased by an American, whose intention it was to remove it carefully, stone by stone, and re-erect it in its original state on the other side of the Atlantic. Demolition had so far begun ia September 1911 that the celebrated fireplaces for which, it is said, the American had paid £2,800-were actually conveyed by road to Tilbury, en route for the United States. The building seemed doomed when at the last moment, in November 1911, Lord Curzon came to the rescue and purchased the Castle. In May 1912 he also obtained possession of the fireplaces, which, after lying at Tilbury for over eight months, were restored to the Castle on the 5tl June in that year. Speaking on that occasion, Lord Curzon said that they proposed excavating the whole of the Castle area in order to discover as far as possible what was there before, but he had no intention of rebuilding anything that was gone. The keep was almost the only structure that remained, but all about the inner walls were buildings of various descriptions constituting one of the greatest mansions in that part of England. We have it from records that the builder of the Castle, Sir Ralph Cromwell, Treasurer of the Exchequer to Henry VII., rode abroad with 120 men and lived with 100 personal retainers at Tattershall, which means that he was surrounded with great circumstance of pomp and position.

The work of restoration has taken two and a half years to complete. Both the moats, which had been filled in, have been re-excavated and connected with the local canal, whilst the fabric of the Castle, which was in partial ruin, has been completely overhauled and made safe, and floors have been put in in each of the four stories. The mantelpieces have been restored

to their niches, the mullions and traceries of the windows and glass put in.

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Lord Curzon has earned the gratitude of us all for his public-spirited action in preserving for the use of the nation this precious relic of a fortress-residence of the Tudor period.

# The New Professor of Architecture at the Massachusetts Institute.

Mr. Ralph Adams Cram, of the firm of Cram & Ferguson (formerly Cram, Goodhue & Ferguson), of Boston, U.S.A., who was recently elected Hon. Corresponding Member of the Royal Institute, has been appointed senior Professor of Architecture at the Massachusetts Institute of Technology. Members will recall the brilliant Paper, with its fine series of lantern illustrations, on "Recent University Architecture in the United States," which Mr. Cram crossed the Atlantic expressly to deliver before the Institute some two years ago [Journal, 25th May 1912].

Mr. Cram, amid the claims of a large and exacting practice, has always taken a keen interest in the architectural education movement. While at the Massachusetts Institute he will continue the active practice of his profession, and his presence in so important a position on the faculty will enable the school to keep in close touch with the problems of the day and the needs of the profession. The majority of the architectural teaching staff have g iduated from the Ecole des Beaux-Arts or from the Massachusetts Institute itself, which has carried on the best traditions of the famous French school with such modifications as were necessary to meet the differing conditions of the country. Many years ago Mr. Cram was credited with a critical attitude towards the methods of the French school. During the last ten years, however, he has devoted a great deal of attention to the problem of architectural education, and his investigations have brought him more and more into harmony with the system of the Beaux-Arts, leaving him, however, sufficiently alive to its possible defects to safeguard him from following its traditions blindly. For the past six years he has been Chairman of the Committee on Education of the American Institute of Architects, and is well informed on the teaching conditions of the country. Discussing his policy in his new sphere of action, Mr. Cram gave it as his opinion that there should be constant communication between the educational authority and the leading members of the architectural profession, and particularly with the American Institute of Architects, as to the essentials demanded by the practice of the day. Education, to be worthy of its purposes, must satisfy these essentials, and it should be cognisant of the best tendencies of the profession as expressed through the leading members in the country of all schools of design.

The extent of Mr. Cram's practice is of interest in connection with his new appointment. His firm have specialised in school and ecclesiastical architecture, and their buildings grace many a landscape on the

North American Continent. At Princeton, where Mr. Cram is supervising architect, his special works have been the Graduate College and the Cleveland Tower, which have cost some £150,000. The firm are responsible for the splendid new quarters of the Military College at West Point [ibid., pp. 515-517]; of the buildings erecting one after another for the Price Institute at Houston, Texas, to cost about £1,250,000; of the Women's College at Sweet Briar, Virginia, of Phillips Exeter, and of the Taft School, Connecticut. Their church buildings are very numerous and among the best known in the States. For two years Mr. Cram has personally been the consulting architect of the Cathedral of St. John the Divine, while the entire work of the nave (costing over £200,000), the Synod House, Bishop's House, Deanery, and a chapel of the chevet are by his firm. The most "sensational" of their churches (to quote an American paper) is St. Thomas's, the largest and most costly parish church in the world, the expenditure so far having run into n arly £250,000. Then there are, to mention buildings only of the first rank, the Halifax Cathedral, Detroit Cathedral, the Pro-Cathedral, Havana, and the Cathedral Church at Toronto, now under construction.

Despite the stress of professional work Mr. Cram has found time for the exercise of his literary talent. He has been a frequent contributor to magazines and reviews and has published the following books:—Black Spirits and White (1901), Church Building (1901), The Rained Abbeys of Great Britain (1906), The Gothic Quest (1907), Excalibur, and The Ministry of Art, recently issued.

# University of London: Appointment to the New Chair of Town Planning.

Professor S. D. Adshead, M.A. [F.], has been appointed as from 1st September 1914 to the University part-time Chair of Town-Planning, tenable at University College. Since 1909 Mr. Adshead has been Professor of Town-Planning at Liverpool. He was the author, in 1910, of the scheme for the reconstruction of the Duchy of Cornwall estates in South London, and has been concerned with town-planning operations at Birkenhead, Wolverhampton, and other towns.

The Chair of Town-Planning is associated with the University Department of Architecture, of which Professor F. M. Simpson [F.] is Director; and the engineering aspects of town-planning will be dealt with by the recently appointed Chadwick Professor of Municipal Engineering, Mr. E. R. Matthews, A.M.Inst.C.E.

It will be remembered that new and convenient buildings have recently been provided for the Department on the north-west front of University College.

#### Roman and Post-Roman London.

#### Professor F. Haverfield writes :-

On the 6th April last, Mr. W. R. Davidge [A.] read to the Institute a Paper on the Development of

London, which is printed in the JOURNAL of the 11th April. That Paper was concerned mainly with mediaval and modern, and indeed future London, but it opened with an interesting conjecture about Roman London. Mr. Davidge argued that it was possible to trace in the streets of the city of to-day some vestiges of a rectangular town-planning such as characterised many ancient cities, and such as I had recently described in my work on Ancient Town Planning (Oxford, 1914). In the course of the discussion which followed the reading of the paper, I said that I should like to take time to consider Mr. Davidge's views, which were entirely new to me, and to compare them with the details of recorded discoveries in London. It was obvious that everything depended on whether Roman structural remains had ever been found underlying the streets which Mr. Davidge had selected as preserving Roman lines. If they had, these streets could not really be identical in course with any Roman thoroughfares: with this point Mr. Davidge had not dealt, and it was not possible to deal with it without reference to books. I have now inquired into the matter further and find myself unable to accept Mr. Davidge's theory. His suggested Roman streets are few, Cheapside with Poultry, Cannon Street and-for a north and south road—the way up from old London Bridge into Gracechurch Street. Now Cheapside appears, from the details given in the Victoria History of London, to have yielded a Roman pavement from the middle of its course, and though Wren says he unearthed a " causeway " 4 ft. thick and 18 ft. deep below the site of the present tower of St. Mary-le-Bow, it is not at all clear that this was a Roman street, especially as it seems to have lain under or somehow belonged to a Roman building which Wren took to be a temple or the like. The east end of Cannon Street seems also to cross sites of Roman structures, and the same seems true of Gracechurch Street. Mr. Davidge further refers to a chalk pavement found in 1786 in Birchin Lane, which he takes to be a continuation of the Roman Cheapside. But it is not so plain that this chalk pavement—not itself a good road material—is the remain of a road of any sort. For the rest, Mr. Davidge's supposed traces of a chessboard pattern of Roman streets coincides nowhere to any real extent with the lines of later streets. Nor, let me add, do they seem to end in known Roman gates in the Roman walls round Londinium, except in one solitary case. Now if one gate had stood awry, we could excuse it, if (as is likely) the walls of Londinium were built rather late in the history of the Roman town-just as we excuse the Porta Nigra at Trier, the east gate at Silchester, the north gate at Caerwent (see my Ancient Town Planning, pp. 126-133). But when all but one stand awry, it is a different story. On the whole, I conclude that Mr. Davidge has not made out his case either for a regular street pattern or for a survival of any Roman street in the modern thoroughfares of London.

Such a survival may possibly be detected some day, though it does not seem very likely; such a pattern may well have existed. At present we have no certain knowledge of either.—F. HAVERFIELD.

## OBITUARY.

Frederick Dare Clapham. Many members of the profession will have read with the deepest region the account of the terribly sudden and tragic end of Frederick Dare Clapham, to which reference was made in the last issue. A man of many activities, Clapham was perhaps better known to us in connection with the work of the Architectural Association; whether you made his acquaintance when he was carrying out the duties of Vice-President of that body, or serving as an ordinary member of their Council, or actively engaged in furthering their annual excursion, their dinners, or their plays, you always found that whenever Clapham undertook to do a thing you could rely on its being done to the best of his ability. It was this quality of his that must have caused him to be of the greatest service to the late Mr. E. W. Mountford, in whose office several of the most important years of his architectural career were passed. Starting at first as Mr. Mountford's assistant, it fell to his lot to carry to a conclusion, while his principal was incapacitated through illness, many of the very important works then being carried out in that office, and it is a this respect that he will be remembered in connection with such buildings as the new Old Bailey, the Lancaster Town Hall, &c. Later Mr. Mountford made him a partner, and on his death Clapham continued to carry on the practice. Before going to Mr. Mountford, Clapham was a pupil of Mr. E. J. May, though his first experiences of architecture were gained in the office of the late Mr. Norman Shaw, where he went for a "trial trip." Later he carried out the Public Library at Kingston-upon-Thames in conjunction with Mr. Alfred Cox, and the design that he prepared in collaboration with Mr. Henry Tanner, jun., in the competition for the new University Buildings at Belfast was one of those premiated. He also carried out, amongst other works, the Library of the Battersea Polytechnic and a mausoleum in the cemetery at Putney. Latterly he had not perhaps always the best of luck, and he put in for and was one of those selected for the post of City Surveyor of Calcutta. However, he remained in England and entered into partnership with Mr. Symons Jeune. Their association was assuming a distinctly promising aspect when there occurred the unfortunate accident that took him from amongst us at the early age of 41. All who knew him, and there were many, will join with us in a genuine expression of regret at his untimely death.—Percy W. Lovell [A.].

M. Charles Mewes.—The death occurred in Paris on the 10th inst. of M. Charles Mewes, Architecte Diplô:né, Arbitre près le Tribunal de Commerce, OBITUARY

S.C. Chevalier de la Légion d'Honneur, M. Mewès wa- senior partner in the firm of Messrs. Mewès & Davis, architects, of 39 Maddox Street, Hanover Square. He also practised in Paris and Cologne, in the latter town being in partnership with M. Alghouse Bischoff. With Mr. Arthur J. Davis [F]he was responsible, among other works, for the following buildings, &c., in England: Ritz Hotel, Piccadilly; Morning Post Offices, Strand: Royal Automobile Club, Pall Mall (Mr. E. Keynes Purchase |F| was joint architect for this building): decoration of the Cunard liner Aquitania; Consulting Architect to the Cunard Steamship Co., for their new building in Liverpool: decoration of the S.S. Amerika, for the Hamburg-Amerika Line: New Theatre and Boxing Hall for the National Sporting Club: Cavalry Club, Piccadilly (Extension); Cunard Steamship Company's Offices, Cockspur Street: Carlton Hotel, remodelling and decorating interior: Hvde Park Hotel, internal alterations and decorations: extensive alterations and decorations at 1 Belgrave Square, S.W., for Mr. W. Koch; 49 Belgrave Square, for Mr. Otto Beit: 8 Grosvenor Square, for the Hon. Henry Coventry: 27 Grosvenor Square, for Mr. Robert Fleming: 18 Grosvenor Square, for Mrs. John Astor; Luton Hoo, Luton, for the late Sir Julius Wernher; Polesden Lacey, Dorking, for the Hon, Mrs. Ronald Greville; Coombe Court, Kingston Hill, Surrey, for the Marquis of Ripon; Glanusk Park, Brecon, for Lord Glanusk. Also decorative work at 11 Portman Square, W., for the Duke of Beaufort; 27 Portman Square, W., for Mr. Ernest Cunard: Stafford House, for the Countess of Stafford. M. Mewès also executed important works from his offices in Paris and Cologne, and in Spain in conjunction with M. Landecho. In Cologne, in partnership with M. Bischoff, he was responsible for the fitting and decoration of the Hamburg-Amerika liners Kaiserin, Augusta, Imperator, and Vaterland.

Mr. John Brooke, of Manchester, who died at his residence, The Hive, Bowden, on the 1st August, in his 61st year, was elected an Associate of the Institute in 1881 and Fellow in 1908. He was President of the Manchester Society of Architects in the sessional years 1912-14, and during this period represented his Society on the Council of the Institute. Mr. Brooke served his articles with Mr. Frederick Bakewell, of Nottingham, being a fellow-pupil with Mr. A. N. Bromley [F]. As a student of the Nottingham School of Art, his work in architectural design was selected for exhibition in the national competition, and he carried off a local prize offered by the Nottingham Corporation for architectural design. He began practice in 1876, being for five years in partnership with Messrs. Corbett & Sons, of Manchester, and afterwards for three years with Mr. A. H. Davies-Colley [A.]. He then started in independent practice, which in course of time extended from Manchester and neighbourhood to Cheshire, Shropshire, Staffordshire, Leicester-

shire, Nottinghamshire, Northamptonshire, Yorkshire, Lancashire, Durham Kent, and Surrey. His work was very varied in scope, including country houses, both restorations and new work, churches, parsonages and schoolhouses, almshouses and houses of rest, hospitals and commercial buildings. Among important works may be mentioned Ollerton Grange, Knutsford; Edinscourt House, Disley; the new principal entrance gateway and lodge at Welbeck Abbey, for the Duke of Portland; Albion Church, Ashton-under-Lyne; Handford Parish Church; St. George's Vicarage, Mossley; Deansgate Arcade, consisting of a large number of shops and other premises; almshouses at Welbeck; the Godfrey Ermen Home of Rest for the Blind, Southport; premises for the Manchester Diocesan Church House Company, comprising a hall with more than a thousand sittings, church and ladies' clubs, offices for the diocesan and kindred societies, council, committee and other rooms; Holdsworth Hall and Church House, Manchester. He was joint architect with Mr. Edwin T. Hall [F] of the Manchester New Infirmary, their designs being selected by Sir John Burnet as assessor from among those submitted by twelve nominated architects. In 1912 Mr. Brooke took into partnership Mr. C. Ernest Elcock [F]. Under the style of Messrs. John Brooke & Elcock, practising at 18 Exchange Street, Manchester, the firm were the architects of the new Town Hall and Market buildings now erecting at Denbigh, and they were awarded the second premium for their designs for the Liverpool Sanatorium for Tuberculosis.

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Mr. Arthur Charles Bulmer Booth, whose death occurred on the 17th July, aged 70, was for many years a partner in the late firm of Hudson & Booth. He was a pupil of the late Joseph Springbolt. and afterwards entered the office of the late Professor Aitchison, R.A., as assistant, where he remained until he joined Mr. William Hudson, who had an extensive practice in the City. Later Mr. Booth became a partner of the firm, with Mr. Hudson, jun., the practice being carried on under the title of Hudson, Son, and Booth, until the death of Mr. William Hudson, after which it was continued by the remaining partners, and subsequently by Mr. Booth alone. Mr. Booth was elected an Associate of the Institute in 1881, and served for many years on its committees. He was also one of the oldest members of the Architectural Association, having joined that body in 1863. In these early days he took an active part in the work and organisation of the Association, acting as Visitor to the classes, etc., while, having a good tenor voice, he joined heartily in the old A.A. Plays and Soirées. In the early days of his practice he carried out a considerable amount of domestic work, and after his partnership with Mr. Hudson he became responsible for most of the architectural side of the firm's work, Mr. Hudson, jun., attending to the surveying and valuing branches of the business. Owing to the

cutting of Queen Victoria Street in 1870, several of Wren's churches were interfered with by the removal of old property abutting upon them, and the firm being at that time surveyors to the parishes of St. Nicholas Cole Abbey, St. Benets, Paul's Wharf, and St. Andrew by the Wardrobe, they were instructed to make the necessary alterations and improvements. The most extensive work was required to the Churches of St. Nicholas and St. Andrew, entirely new fronts to the new street being necessary; and at a later date a new organ gallery was erected at St. Nicholas, while the interiors of St. Benet Paul's Wharf and St. Andrew's were remodelled to a considerable extent to meet modern requirements. These alterations were most carefully carried through by Mr. Booth, the old work being scrupulously preserved and used wherever possible, while the continuity of Wren's design was maintained in the new work. The practice of the firm embraced building works of almost every character, both in the City and suburbs. The following are a few of the more important: Business premises 66 Great Titchfield Street; alterations to Lyceum Theatre: Rochester Buildings, Leadenhall Street: residence for E. F. Hilton, Esq., Balham; 111 High Street, Marylebone; 114 and 115 High Street, Marylebone; factory for the London Liquid Carbonic Acid Gas Company: warehouse and showrooms, Upper Thames Street, for Henry O'Brien, Esq. (first section): Mullen's Hotel, Ironmonger Lane: warehouse and offices for Messrs. Blundel Spence & Co., Upper Thames Street; No. 10 Clifford Street, W.: No. 8 Broadway, Ludgate Hill; addition to Paul's Bonded Warehouses, Upper Thames Street; showrooms and offices, Upper Thames Street, for Henry O'Brien, Esq. (second section): office building, 31 and 32 Crutched Friars; Farrow's Bank, No. 1 Cheapside, E.C.; alterations and additions to 111 and 113 Queen Victoria Street, E.C., offices of the Financial News. Just before his death Mr. Booth had taken into partnership his chief assistant, Mr. G. Morriss Viner, Licentiate R.I.B.A., and the practice will be continued by him at 113 Queen Victoria Street.

Mr. James Crofts Powell, who died on the 17th August, was a member of the firm which has been known for some generations as James Powell & Sons. of the Whitefriars Glassworks. His share in the management of the business was the artistic department, and especially the stained glass. responsible for the carrying out of the very fine windows at Liverpool Cathedral, which, as The Times obituary notice says, have struck rather a new note and shown that glass-painting may dispense with mock-medievalism; that it may be modern in treatment and yet keep touch with native English Gothic. The firm carried out the mosaic decoration at St. Paul's from the designs of Sir Wm. Richmond. and the materials and methods of working employed were described by Mr. Powell in a Paper on Mosaic read before the Institute in February 1894 [JOURNAL, 15th February 1894].

CORRESPONDENCE.

Professor Haverfield's "Ancient Town Planning."

To the Editor, JOURNAL R.I.B.A.,-

SIR,-I find that some words I used in the Review in the July issue of the Journal of Professor Haverfield's 'Ancient Town Planning " have given the impression that I wished to controvert the author's rejection of the late Mr. Bellows's theory about an exact Roman survival in the four main streets of Gloucester. That was not at all my intention, and I only meant to express regret that Professor Haverfield had not added a sentence or two in his book to show where Mr. Bellows went wrong. The case of Gloucester is an interesting one and well worthy of study.-I am, etc., G. BALDWIN BROWN [Hon. A.].

Sunlight and the Colours of Stained Glass.

12 Buckingham Street, W.C.: 31st July 1914.

To the Editor, JOURNAL R.I.B.A ,-

SIR, Mr. Noël Heaton's letter in your issue for July attributed any loss of colour in light passing through old stained glass and reflected from interior stonework to diffusion and attenuation by a "film or patina of corrosion" or by dirt; and he states that the phenomenon can only be observed when one is deceived by the contrast with the more powerful light through patches of new glass.

My informant did not mention any such patching in the case he observed, and I anticipated that the chief cause was that which Mr. Heaton observed in an aggravated and obvious form at La Ste, Chapelleviz., absorption by the interior stonework.

It should be possible to readily test the effect of the reflecting surface by placing a handkerchief or piece of white paper on the sunlit patch.

> Yours faithfully, PERCY J. WALDRAM, Licentiate

The Allied Societies.

The Guildhall, 28th July 1914.

To the Editor, JOURNAL R.I.B.A.,-

SIR.-I was much surprised to see in the JOURNAL of the 25th inst. a report of a speech by Mr. Adam F. Watson including the following words :-

" With reference to the particular societies mentioned by Mr. Perks, namely the Edinburgh Association and the Hampshire Society, Mr. Perks spoke about their being composed 'mainly of people who had merely an interest in architecture,' but," etc.

Of course I never made that ridiculous statement. Yours obediently, SYDNEY PERKS [F.].

The Allied Societies and the Institute Funds.

14 Parade Chambers, Sheffield: 11th August 1914.

To the Editor, JOURNAL R.I.B.A.,

SIR,-What audacity to suggest that the Allied Societies contribute to the funds of the Institute! May I tender my congratulations to Mr. Perks on his vigilance in this matter, and, clever controversial at that he is, upon the manner in which he has seized and adapted to his own point of view the half-

truth of which he complains?

The whole of the Allied Societies put together do not contribute one penny; on the contrary, they a e a heavy expense to the R.I.B.A. . . . For the year 1913 they cost us £619 15s." So writes Mr. Perks in the Journal of 25th July last. We all know that the Allied Societies, as such, do not contribute to the funds of the Institute; it is fortunate for their yearly balance sheets that this is the case. Surely Mr. Perks is aware that the sum of £538 2s. 6d., the amount contributed last year to the Allied Societies, represents a sum just four times greater paid as subscriptions by Fellows and Associates of the Institute who are also members of Allied Societies. Unfortunately, all provincial Fellows and Associates are not members of Allied Societies, or the amount contributed would have been greater, and it may be that the heart of Mr. Perks would have been proportionately more deeply grieved.

The subscriptions of Fellows and Associates who are also members of Allied Societies amount to nearly one-third of the total sum received from these classes of members. These particular Fellows and Associates form a not insignificant part of those comprised in the "us" mentioned by Mr. Perks. They desire and have received consideration from the Council of the Institute, and no doubt will continue to do so in the

future.

The great majority of the Licentiates are, I believe, provincial architects; many of them are members of Allied Societies. It was, in fact, due to the influence of the latter that so many architects joined the class of Licentiates. Indirectly, therefore, the subscriptions received from members of this class are largely due to the Allied Societies, and this fact should be placed to their credit in any estimate of the cost they entail upon the funds of the Institute.

Such quibbles as this—whether the Allied Societies do or do not contribute to the funds of the Institute—will not deceive any who know the facts of the case. But the unwary may be led astray, and for this reason I have tried to put the case of the Allied Societies in reply to Mr. Perks' somewhat specious arguments.

Yours obediently,

JAMES R. WIGFULL [A.]

#### COMPETITIONS.

#### New School, Sunderland Road, Gateshead.

Members and Licentiates of the Royal Institute of British Architects must not take part in the above competition, as the conditions are not in accordance with the published Regulations of the Royal Institute for Architectural Competitions.

By Order of the Council,

IAN MACALISTER, Secretary.

#### Shakespeare Memorial National Theatre.

The following conditions must be observed by architects proposing to submit designs in accordance with the advertisement appearing in *The Times* of July 21st, 1914, and printed in the JOURNAL for 25th July, p. 612.

The names of the architects sending in designs, and also their designs, will be seen only by the

Assessor and the Sub-Committee.

The drawings may be the original working drawings of buildings erected, or they may be elevations of buildings designed but not erected.

Not more than five drawings or photographs should be submitted, and not more than two

A short report of the designs may be submitted, and also a list of buildings of importance designed or erected.

All drawings to be sent in a portfolio on or before the 15th day of September 1914, to The Secretary, the Shakespeare Memorial Committee, 3a, Dean's Yard, Westminster Abbey, S.W.

The Trustees are the Earl of Plymouth, the Earl of Lytton, and Sir Carl Meyer, Bart.

#### Dublin Town Planning.

In consequence of the various difficulties arising from the present situation, the Lord Lieutenant of Ireland has decided to postpone the time for sending in plans, etc., for the Dublin Town Planning Competition until April 1915.

### THE EXAMINATIONS.

#### The Final: Designs approved.

The Board of Architectural Education announce that the designs submitted by the following students who are qualifying for the Final Examination have been approved:—

#### SUBJECT XV.

(a) Design for a Museum (detached) in the Park of a Country Town.

Adams : P. J. Alison : W. Allison : W. Armstrong : J. R. Batty : W. A. Brooks: C. J. Brown: J. M. Burford : J. Butt . P. Carey: J. Carreras : L. E. Cheek: C. C. Ching: W. L. Clare: A. D. Cosser: G. A. Cullen: A. Currie: J. K. Davison: W. R. Donaldson: B. Dowsett : T. W. Duncan: R. A.

Evans: T. C. Fernyhough: S. Forbes: A. S. Ford: L. S. Frater: R. Gooder: F. E. Gossling: H. F. Graham: R. D. Hague: H. V. Hamilton : A. B. Herford: T. Holt: G. H. G. Hossack: J. Howeroft : G. B. Jacob: J. H. Jones: L. F. Jones: W. O. Jopling: A. B. B. Kassem: H. Z. Koch: M. D. N. Lancaster: C.

Leadam: G. S. Lister: H. A. Loweth: S. H. Maddock: R. H. Moore: R. S. Moserop: W. N. J. Moss: D. J. Nathanielsz: J. J. Pace : C. L. Palmer: J. Robertson: G. A. K. Ryan : H. A. St. Leger: C. D. Sanders: T. A. Shenstone: G. Spence : A. T. Takekoshi : K. Taylor: J. A. C. Walch: J. B. M. Whitehead: P. Wilkinson: F.

# (b) Design for an Open Timber Roof to a School

	II. Alaka x	
Adams: W. A. C.	Grellier: C.	Robertson: M.
Armstrong : J. R.	Lavender: E. C.	Smith: A.
Aslin: C. H.	Lawton: W. V.	Toothill: J. C. P.
Booker: G. A.	MacMillan : A. L.	Vinden: G.
Cawkwell: R.	Moore : J.	Walker: D. H.
Craske : C. W.	Picton: C. S.	Walker: H. F.
Fyfe: J. S.	Pidsley: W. G.	Wright: C. H.
C C II		

Designs for other subjects from the following candidates have also been approved:—

Burford: J. Hamilton: A. B. Mortimer: A. L.

#### LEGAL.

# Application of the London Building Act 1894 to the London County Council's Elementary Schools.

DAUBNEY (DISTRICT SURVEYOR) v. ARERS & Co., LTD.

This case was heard before Mr. A. E. Gill at the Tower Bridge Police Court on 31st July 1914.

The District Surveyor, Mr. Chas. A. Danbuey, summoned the contractors for not having given him the usual notice. He had been in communication with them and the London County Council from January to June 1914 urging them to give notice, but without result. The London County Council defended the case on behalf of the contractors, whom they had instructed not to give notice.

Mr. Gill delivered his decision as follows :-

The defendants are contractors earrying out certain building work for the London County Council as the Education Authority for London at their school in Southwark Park Road. It is admitted that no notice of such work has been served upon complainant, who is the surveyor for the district in which the subrol is situate.

It has been proved or admitted that the work is being dome upon building "according to plans which are, under regulations relating to the payment of grants, required to be, and have been, approved by the Board of Education "within the meaning of section 3 of the Education (Administrative Provisions) Act, 1911. Under that Act "any provisions in any local Act dealing with the construction of new buildings" do not apply "in the case of any new buildings "so approved. If therefore the buildings in this case are "new buildings "the defendants are under that Act exempt from serving a building notice.

The work in question is of a twofold character. It consists of (1) certain alterations, which I do not think it necessary to describe in detail, made to an old building—namely, the infants' department. As altered it appears in the plan A put in by the defendants, described as the Infants' Department Remodelled. (2) The addition of a new wing, described in the plan as the Infants' Department Extension. This projects from the north-western corner of the old building almost at right angles to its western side.

The extension consists of a corridor with class-rooms opening off, and is connected with the original building by an opening cut in the external wall of the latter so as to form a continuous passage. At the end of the passage remote from the old building is an entrance from the playground.

It has not been contended that the whole building as altered and extended constitutes a "new building." It is admitted that the "Remodelled Infants Department" is not a "new building." But it is contended that the extension is a "new building" within the meaning of section 3 of the Education (Administrative Provisions: Act. 1911.

(Administrative Provisions) Act, 1911.

The term "new building" in this section must, I think, be either construed in its natural sense or explained by reference to the London Building Acts. By the London Building Act, 1894, section 5 (6), the term "new building" is defined "to

mean and include," inter alia, "any space between walls and buildings which is roofed or commenced to be roofed after the commencement of this Act." It has been contended that this definition covers the case of the new wing. I do not think that those words can apply to an addition. Otherwise it is difficult to understand how any addition can escape being included in the category of new buildings.

But the London Building Act, 1894, clearly distinguishes between "new buildings" and "additions" to old ones, They are so distinguished in the Third Schedule. The district surveyor's fees are different in the case of New Buildings and in that of "additions." Additions are placed on the same footing as alterations. Similarly in section 209, which subjects "additions," "alterations" and other work done upon a building to the provisions of the Act relating to new buildings, it is assumed that an "addition" is distinct from a new building.

Whether a building is a new building or an addition to an old one must be a question of fact and degree. In the case of Holliday & Greenwood, Ltd., v. District Surreyors' Association and Dicksee the Court appear to have so treated it. In my opinion whether the expression "new building" in the Education (Administrative Provisions) Act. 1911. section 3, is construed in its natural sense or by reference to the London Building Act, the extension of the infants' department is not a new building but an addition to an old one; and the defendants were therefore not exempt under that Act from serving a building notice in respect to it. However this may be, it is admitted that the defendants were not exempt under that Act from serving a building notice in respect to the alterations to the old building.

It is, however, contended that apart from the Act of 1911 the defendants were not liable to serve a building notice on the following grounds. It is contended: (1) That by section 201 (5) of the London Building Act, 1894, the building in question is exempt from the operation of Parts VI and VII of the Act as being a "public building" "belonging to or "occupied for public purposes by the County Council of London," as by section 5 (27) "public building" means "a building used or constructed or adapted to be used as a . . . school "; and (2) that although section 145, which provides for the service of a building notice, is not included in Parts VI or VII, the defendants were not liable to serve a notice because in the particular facts of this case the district surveyor had no duties to perform.

It is pointed out that the exemption from Parts VI and VII relieves the district surveyor of all duties in respect to materials and construction. As to the other parts of the Act, it is urged that the buildings are remote from the street. No question of building line in fact arises. The elevation of the roof of the old building has not been raised. The addition has no story above the ground floor. No question of height therefore arises. The case of Westminster Corporation v. Watson (1902 K.B. 717) is relied upon.

As to the first point 1 am of opinion, but with some hesitation, that the exemption under section 201 (5) applies. The second point appears to me to have been decided against the defendants by the joint effect of the cases London County Council v. District Surveyors' Association and Willis (73 J.P. 291) and Galbraith Brothers v. Dicksee (74 J.P. 348). In the latter, Alverstone, C.J., observes: "Mr. Lush has said that in this particular case he (i.e. the district surveyor) would have nothing to do. That may be perfectly true; but it does not follow that because he has nothing to do in a particular case he will have nothing to do in any case." And further en: "The surveyor has to keep the eye of a watch dog on what is going on."

It is to enable the district surveyor to exercise this supervision that notice must be served, and it is not an answer that in a particular case such as the present he may have nothing to do but to ascertain the fact that no breach of the Building Act is involved in the work.

The learned magistrate inflicted a nominal penalty of £1, with £15 15s. costs.

